

## **SECOND YEAR ANNUAL REPORT**

INTERSTATE POLLUTION CONTROL/ROTO-ROOTER SUPERFUND SITE  
Winnebago County  
Rockford, Illinois

Prepared for:

Interstate Pollution Control/Roto-Rooter Superfund Site Remedial Design/Remedial Action Steering Committee

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## **1.0 INTRODUCTION**

This Second Year Annual Report (“report”) has been prepared by Environmental Information Logistics, LLC (EIL) on behalf of the Interstate Pollution Control/Roto-Rooter (“IPC”) Superfund Site Remedial Design/Remedial Action Steering Committee. This report discusses the results of long-term natural attenuation monitoring through the second quarter (June) 2009 sampling event, and satisfies the requirements of the IEPA-approved Groundwater Monitoring Work Plan (“GWMP”), dated March 1, 2006, and IEPA-approved First Year Annual Report/Technical Memorandum (“Tech Memo”), dated August 28, 2008, and the Consent Decree (with Appendix B – Statement of Work (SOW)) with the State of Illinois, dated March 1, 2006.

Section 6.0 of the IEPA-approved GWMP states the following:

*“Annual reports will be prepared and submitted to the IEPA within 45 days of completing each second semi-annual groundwater sampling event (except in years 1, 5, 10, 15, etc., as discussed above and below). Each of the annual reports will include a summary of groundwater data collected during the past year and will include an evaluation, based on the IEPA-approved statistical methodology, of the source of any statistically significant changes to groundwater quality. Where appropriate, the annual report may also recommend changes to the statistical methodology for future monitoring events.”*

This report includes a summary of groundwater quality collected to date during natural attenuation monitoring and a comparison of the results to calculated background groundwater quality standards. This report also includes an alternative source demonstration (ASD) to address the presence of two COCs in downgradient monitoring well MW4 and a revised statistical evaluation approach (in accordance with the GWMP), including some recalculated background groundwater quality standards for selected constituents of concern (COCs).

### **1.1 Site Description and Background**

#### ***1.1.1 Site Description***

The Interstate Pollution Control Inc. (IPC) site (“the site”) is located in an industrial area in the south central part of Rockford, Winnebago County, Illinois north west of Magnolia Peoples Avenue, as shown on the figure included in Attachment 1. The small (approximately 2.8 acre), irregularly-shaped site measures approximately 850 feet long along the north boundary line and 270 feet along the east boundary line.

During IPC’s operation of the site it contained, at various times, at least six underground storage tanks, one large above-ground storage tank, an unlined surface impoundment, a gas fired incinerator, and several structures. IPC’s operation at the site included transporting and bulking of waste oils, solvents and cyanide waste for incineration, resale and/or off-site disposal. Also during IPC’s operation of the site, support service was provided to two sister companies; a portable toilet business and a Roto-Rooter franchise. Prior to IPC’s operations, the site was

extensively quarried and backfilled with various materials including a large quantity of foundry sand. Following filling of the quarry and immediately prior to IPC's operations, the site was the location of an auto salvage yard.

In 1991, private parties negotiated a Partial Consent Decree with the Illinois EPA and the Attorney General of the State of Illinois. The Partial Consent Decree required that the private parties ("Respondents") undertake a Remedial Investigation/Feasibility Study ("RI/FS") at the site. The RI Work Plan was completed in 1992, and the field investigations were conducted in 1993-1994. The final RI Report was submitted in 1997.

Significant removal actions have occurred at the IPC site on two different occasions. The incinerator was removed between 1976 and 1979. IPC conducted partial cleanup of the site in 1979 and 1980, in response to an Illinois Pollution Control Board Order. During this partial cleanup of the site, several bulk tankers containing wastes, approximately 180 yds<sup>3</sup> of material from the surface impoundment, and approximately 120 yd<sup>3</sup> of cyanide contaminated soils were removed. Reportedly, 1,200 drums of contaminated materials were also removed from the site during this cleanup. The surface impoundment was backfilled and graded.

On August 6, 1991, the U.S. EPA issued a Unilateral Administrative Order ("UAO") to IPC and the Respondents to conduct additional removal activities at the site. Beginning in 1992, the Respondents to the UAO fenced the site, removed over 1,400 tons of solid and hazardous waste (including visibly stained soils), demolished and removed all above-ground and underground tanks and significant structures, installed a clay cover over the former impoundments, and substantially cleared the site.

These removal actions eliminated more than 2.9 million pounds of solid and hazardous waste. These materials constituted principal threats at the site and were removed, treated, destroyed or disposed of prior to the initiation of the RI/FS.

### **1.1.2 *Constituents of Concern (COCs)***

A total of 73 chemicals of potential concern ("COPCs") were identified originally in the RI based on previous detections in site soils and were selected for risk assessment. These included 11 volatile organic compounds ("VOCs"), 29 semi-volatile organic compounds ("SVOCs"), 14 pesticide/PCB compounds, 18 trace metals, and cyanide. In addition, a total of 33 chemicals previously detected in on-site groundwater were selected as COPCs. These included 11 VOCs, 10 SVOCs, one pesticide/PCB compound, 11 trace metals, and cyanide. A significantly reduced number of these COPCs were found to be risk drivers, as summarized in the "*Risk Driving Chemicals of Potential Concern*" table from Section V of the ROD.

Based on the previously discussed contaminant removal activities and the installation of the engineered barrier, and as stated in Section 2.4 of the SOW, "*VOCs are the sole constituents of concern*" with respect to long term natural attenuation groundwater monitoring at the site. Section 2.4 of the SOW specifies that "...groundwater will be sampled for TCL VOC's only." during long term natural attenuation monitoring. In addition, paragraph XII of the Record of Decision (ROD) states "*If during each Five Year Review cycle spastically [sic] significant decreases in on-site and down gradient concentrations of trichloroethene and 1,1,1-*

*trichloroethane in shallow groundwater are not verified (which cannot be attributed to upgradient sources), the SVE design pilot test will be implemented."*

Seven VOCs were detected in site monitoring wells during the background data collection period and as reported in the August 28, 2008 First Year Annual Report/Technical Memorandum. These are:

- 1,1,1-trichloroethane
- 1,1-dichloroethane
- 1,1-dichloroethene
- cis-1,2-dichloroethene
- tetrachloroethene
- trichloroethane
- vinyl chloride

However, only four VOCs were proposed originally as site-specific COCs for long-term groundwater quality evaluation. Three VOCs, 1,1-dichloroethane, vinyl chloride, and cis-1,2-dichloroethene, were specifically not proposed as COCs because they were generally detected at elevated concentrations in downgradient monitoring wells and because there was strong evidence to suggest that the downgradient concentrations were biased due to an off-site source (i.e., landfill gas from the adjacent Peoples Avenue Landfill). However, IEPA's approval of the August 28, 2008 First Year Annual Report/Technical Memorandum was conditional based on the inclusion of all seven VOCs as COCs. Therefore, all seven of the VOCs detected during background data collection and as listed above are evaluated herein as COCs.

### **1.1.3 Extent of Groundwater Impacts**

Remedial investigation activities were conducted at the site to evaluate the nature and extent of contamination, and to assess environmental impacts. Detailed results are provided in the *Final Remedial Investigation Report, Interstate Pollution Control Inc. Site, Rockford, Illinois* (Golder Associates Inc., December 1997). In general, site groundwater was found to be impacted with numerous organic and inorganic constituents from a combination of past site activities and from upgradient sources. In addition, landfill gas from the adjacent Peoples Avenue Landfill was detected on-site and identified as another possible source of VOCs in groundwater.

The site is located adjacent to the much larger Southeast Rockford Groundwater Contamination ("SER") site. The SER site began with the discovery of VOCs in groundwater within a residential area of nearly two square miles. The discovery prompted the USEPA to ultimately extend water mains and connect 526 residences to City water at a cost of approximately \$4 million. The SER site was then added to the National Priorities List ("NPL"). After further IEPA study, the SER site was expanded to a ten square mile study area ("SER Study Area") that incorporates almost 20 percent of the City and includes the IPC site. Studies have since indicated the widespread presence of chlorinated solvents in groundwater within this ten square mile area, in concentrations varying from less than 10 ppb to over 10,000 ppb.

The SER ROD defines the 10 ppb extent of the chlorinated VOC plume to extend to approximately 1,200 feet southeast of the IPC site at its closest point. The IEPA and USEPA did

not, however, independently investigate groundwater conditions in the general upgradient vicinity of the IPC site which are known to exhibit elevated concentrations of VOCs as documented in the RI report and the ROD.

It should be noted that, in accordance with the site ROD,

*“One of the most notable outcomes of the groundwater portion of the [RI] investigation was verification that a plume of chlorinated volatile organic compounds, at substantially higher concentrations than occur on site is approaching the site from the north east. The plume is expected to reach the IPC site in 15 to 45 years.”*

This is significant because, given that the RI data collection activities were completed by 1994, the “plume” could possibly reach the site as early as 2009, resulting in degradation of site groundwater quality that is completely unrelated to the performance of the selected remedy and which could be attributed mistakenly to the site. As such, the interpretation of the results of long term natural attenuation monitoring must take into account the potential for groundwater quality degradation due to off-site sources. This approach reduces the possibility of incorrectly concluding that the selected remedy is insufficient and that the remedy must be supplemented with soil vapor extraction.

In fact, and as discussed later in this report, it appears that the upgradient plume has arrived at the site. Therefore, as indicated in the IEPA-approved GWMP and the IEPA-approved First Year Annual Report/Technical Memorandum, this report includes revisions to selected calculated background standards and to the statistical evaluation criteria.

#### **1.1.4 Remediation**

The IEPA selected the remedial alternative with the concurrence of the U.S. EPA and after a detailed analysis of the alternatives included in the approved Feasibility Study (FS). The selected remedial alternative addresses the principal threats by installation of an impermeable barrier over the site, placing institutional controls on future site uses, reinforcing existing city and state groundwater use restrictions, and addressing groundwater contamination resulting from the site by implementing a monitored natural attenuation program. The selected remedy also includes a soil vapor extraction component as a contingency should the IEPA conclude during the five year review periods that site and downgradient groundwater quality has not improved due to continued site releases which cannot be attributed to upgradient sources.

An SVE system was not included as an active part of the current remedy for a number of reasons, as discussed in the FS. First, the incremental improvement in reducing VOC migration to groundwater, and therefore in reducing risk to health and the environment, was deemed minimal following the construction of the surface barrier. Second, the treatment efficiency for an SVE system was not quantifiable given the relatively high VOC load currently on site and the on-going impacts from off-site sources. Finally, there were concerns that an SVE system would induce landfill gas migration from the Peoples Avenue Landfill that would adversely impact the operation of such a system. There were also concerns, discussed with the IEPA during the FS evaluation process, that such landfill gas migration would create a site health and safety issue related to possible explosive hazards.

The engineered barrier was completed in 2006. The groundwater monitoring natural attenuation program began in September 2007 and background data collection at the six site monitoring wells was completed in June 2008. The slight delay between the completion of the engineered barrier and the initiation of natural attenuation monitoring was based on the desire to complete the installation of the two river wells and to collect background data from them simultaneously with the six site monitoring wells. Unfortunately, the installation of the two river wells was delayed more than expected due to access issues beyond the control of the steering committee. Therefore, after a period of time the IEPA requested that background data collection begin at the six site wells even though the two river wells had not been installed.

The two river wells were installed in March 2009 and background data collection at these locations is presently ongoing. This report includes data collected through June 2009 (i.e., the second semiannual event at the site wells and the second quarterly background event at the river wells).

## **1.2 Statistical Analysis Plan**

The current statistical evaluation plan (STEP) was included in the First Year Annual Report/Technical Memorandum and was subsequently approved by IEPA. The STEP includes a three step screening process and was designed to be sufficiently flexible in order to account for possible influence from off-site sources. The flexibility could include the revision of background standards and/or the evaluation criteria, if appropriate, subject to IEPA review and approval.

## **1.3 Second Year Annual Report Overview**

The purpose of this report is to provide the results of long-term natural attenuation monitoring to date at the site, a comparison of the data to previously calculated background groundwater quality standards, an evaluation of whether the site is currently impacting groundwater, and to revise the IEPA-approved statistical evaluation plan to address site-specific conditions. This report is organized as follows:

- Section 2.0 provides on evaluation of groundwater quality based on a comparison of COC detections with calculated COC background standards.
- Section 3.0 includes an alternative source demonstration (ASD) for various COCs detected in monitoring well MW4.
- Section 4.0 includes a revised statistical evaluation approach and the rational for the revisions.
- Section 5.0 includes a summary and conclusions.

## **2.0 EVALUATION OF SITE GROUNDWATER QUALITY**

Background groundwater quality data collection was performed at the six site monitoring wells in accordance with the ROD, SOW, and IEPA-approved GWMP. A site-specific list of seven COCs was selected and background standards were calculated based on the first four quarters of background data collection. The COC list and calculated background standards were approved by IEPA. As will be discussed in Section 4.0, some of the approved calculated background standards are no longer appropriate given that the upgradient VOC plume appears to have reached the site, resulting in groundwater quality bias and rendering the existing calculated background standards obsolete.

Background data collection is presently ongoing in the two recently installed river wells and will be completed following the fourth quarter 2009 sampling event. Specific COC background standards will then be calculated for both river wells and will be submitted to IEPA for review.

### **2.1 Site Groundwater Monitoring Network**

The site groundwater monitoring network consists of six monitoring wells, designated MW1, MW2, MW3, MW4, MW5, and MW6. The locations of these wells are shown on one of the figures included in Attachment 2. Each well is screened at a depth of approximately 60 feet within the shallow sand and gravel aquifer. Both regional and local groundwater flow in this aquifer is generally from northeast to southwest, towards the Rock River. Based on this groundwater flow direction, monitoring wells MW3, MW5, and MW6 are hydraulically upgradient of the site. The remaining three monitoring wells, MW1, MW2, and MW4 are hydraulically downgradient of the site.

### **2.2 River Wells**

Two river wells were installed in March 2009, as required, at the locations shown on one of the figures included in Attachment 2. The river wells are designated MW8 and MW9, and both were installed to a depth of approximately 19 feet. (Note: The designation MW7 is reserved for the “blind” duplicate sample submitted to the laboratory during each monitoring event). Based on current groundwater flow conditions, both river wells are hydraulically downgradient of the site.

### **2.3 Results of Ongoing Natural Attenuation Groundwater Monitoring**

Semiannual groundwater sampling for each of the seven COCs was performed in each of the site monitoring wells during this reporting period. The laboratory data reports are included as Attachment 3. A summary of the analytical results for each COC in each monitoring well is included in the table in Attachment 4. The table in Attachment 4 also includes the original calculated background standards and the new calculated background standards, the latter of which are discussed in Section 4.2.1 of this report. Concentration time trends for each COC in each well are included as Attachment 5.

Each laboratory data report was reviewed for completeness and accuracy, in accordance with the IEPA-approved quality assurance project plan (QAPP). The reviews included laboratory QA/QC documentation and the results of field and quality control blanks. Data validation summaries for each laboratory sampling report are included in Attachment 6.

A discussion of site groundwater quality is included below.

### **2.3.1 Upgradient Site Groundwater Quality**

Upgradient groundwater quality appears to be deteriorating based on recent introwell background exceedances in upgradient wells MW3 (1,1-DCA) and in MW6 (PCE and TCE). However, the deterioration appears to be the result of the expected arrival of the off-site, upgradient VOC plume, not the site. As stated in the ROD,

*“One of the most notable outcomes of the groundwater portion of the [RI] investigation was verification that a plume of chlorinated volatile organic compounds, at substantially higher concentrations than occur on site is approaching the site from the north east. The plume is expected to reach the IPC site in 15 to 45 years.”*

Given that the RI data collection activities were completed by 1994, arrival of the plume in 2009 (i.e., now) is entirely consistent with the predictions included in the RI Report. This appears to be further supported by the time trends included in Attachment 5, and the total (i.e., cumulative) VOC load trends included as Attachment 7. As shown in the total VOC load time trends, not only is the total (i.e., cumulative) VOC load consistently higher in the three upgradient wells compared to the three downgradient wells, the difference between the two has increased to its highest point during since long term natural attenuation monitoring began.

In any case, the IEPA-approved statistical analysis plan includes the following as a first screening step:

***“The first phase will involve a screening step to evaluate whether or not the upgradient plume is impacting the upgradient site wells. To accomplish this, introwell prediction limits will be calculated for each COC in each of the three upgradient monitoring wells, MW3, MW5, and MW6. Subsequent groundwater monitoring results will be compared to the calculated introwell standards. If there are no “failures”, i.e., no COC exceedances of the calculated introwell standards, then we will conclude that there are presently no off-site impacts affecting site groundwater quality, and the analysis will continue with the second phase, discussed below. If, however, there is a COC exceedance of a calculated introwell standard, then we will have to reconsider an appropriate course of action. If, for example, only one COC “fails” the introwell test, then possibly statistical analysis can continue with the second phase not including the failed COC. This would be addressed in the appropriate annual report. If, however, numerous or all the COCs fail the upgradient introwell test, then a revision of the statistical approach, or possibly a recalculation of background standards, could be appropriate. This would also be addressed in the appropriate annual report, and any proposed revisions or recalculations would be subject to IEPA review.”*** (Bold added).

The IEPA-approved statistical analysis plan also included an evaluation flow chart, included herein as Attachment 8, which indicated that a failed upgradient intrawell comparison would result in the conclusion that the off-site plume was arriving and requiring the recalculation of background standards. Clearly, therefore, it is appropriate at this time to recalculate some of the intrawell background standards and to revise the statistical analysis approach. This is discussed in detail in Section 4.0.

### ***2.3.2 Downgradient Site Groundwater Quality***

Downgradient groundwater quality in the three site wells appears to be generally stable or improving. Total VOC load in the downgradient wells, depicted in the time trends included as Attachment 7, is presently at its lowest value since long term natural attenuation monitoring began. However, the current data set includes only six data points and is, therefore, relatively small.

There were two interwell exceedances in MW4; one for 1,1-DCA and one for vinyl chloride. The presence of both these compounds at relatively high concentrations (compared to the other site monitoring wells) was reported previously in the First Year Annual Report/Technical Memorandum and was attributed to landfill gas from a known off-site/side gradient and uncontained source, the Peoples Avenue Landfill. This was the primary motivation behind our initial request to exclude these two compounds from long-term natural attenuation monitoring, which was denied by IEPA.

This report includes an alternative source demonstration (ASD) for both compounds in Section 3.0.

### ***2.3.3 Downgradient River Well Groundwater Quality***

There were no VOCs detected in river well MW9. Only one VOC, trichloroethene, was detected in MW8 during the most recent monitoring event. However, the concentration was generally much less than in most of the site wells, more than an order of magnitude less than in half the site wells. Therefore, there is no indication of site-related groundwater impacts in the river wells.

### **3.0 ALTERNATIVE SOURCE DEMONSTRATION FOR COCS DETECTED IN SITE MONITORING WELL MW4**

Groundwater samples collected during the quarterly background monitoring were also analyzed for dissolved methane, specifically during the third quarter 2008 monitoring event, and as reported previously in the First Year Annual Report/Technical Memorandum. Dissolved methane, a major component of landfill gas, was detected in five of the six site monitoring wells as summarized in the table below.

Results of Dissolved Methane Analyses

Sample Location	Concentration of Dissolved Methane (ug/L)	Reporting Limit (ug/L)
MW1	2.1	0.19
MW2	2.1	0.19
MW3	4.1	0.19
MW4	42	0.19
MW5	ND	0.19
MW6	1.2	0.19
MW7*	1.3	0.19
Field blank	ND	0.19
Trip blank	ND	0.19

ND = not detected at the reporting limit

\* “blind” duplicate sample collected from MW6

#### **3.1 Sources of Naturally Occurring Dissolved Methane**

The relatively low dissolved methane concentrations in four of the wells may be indicative of methanogenesis, a naturally occurring form of anaerobic respiration associated with certain common microbes in the presence of organic material. Subsurface soil at the site was reported in the RI report to have contained relatively high concentrations of total organic carbon (TOC). Given that the recently constructed site cap has likely created subsurface anaerobic conditions, the presence of an abundant “food” source (i.e., the high TOC), it is not unreasonable to assume that methanogenesis is occurring. Therefore, the site-wide presence of relatively low concentrations of dissolved methane could indicate that natural attenuation is active.

#### **3.2 Off-Site Sources of Dissolved Methane**

The Peoples Avenue Landfill is located adjacent to and south/southeast of the site, and reportedly received a combination of residential, commercial, and industrial wastes. The combustible gas methane was previously detected in the basement of the adjacent pet food plant, and it was attributed to the Peoples Avenue Landfill (USEPA, 1976; RI Report, 1994). Two isolated areas with elevated combustible gas readings (i.e., methane) were also identified between the site and the Peoples Avenue Landfill during RI activities conducted in the early

1990's. Soil gas collected from these areas also contained slightly elevated concentrations of VOCs. The conclusion contained in the RI was:

*"The USEPA and RI soil gas results indicate, therefore, that the Peoples Avenue Landfill may be an active source of combustible gases and, possibly, organic vapors in the Site area."*

Landfill gas migration is a commonly known transport mechanism for numerous VOCs including tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, vinyl chloride, and others (Vogel et al., 1987). As such, landfill gas migration has been implicated to be a principal source of many VOCs, including those currently detected in site groundwater, in groundwater near landfills.

Given that MW4 is located adjacent to the Peoples Avenue Landfill and it contains, by far, the highest concentration of dissolved methane compared to the other wells, it is highly likely that landfill gas from the Peoples Avenue Landfill is the source for much or all of the dissolved methane in MW4. This is consistent with the previous reports documented herein. And given that landfill gas is a common carrier of numerous VOCs, it is fair to conclude that the elevated concentrations of 1,1-DCA and vinyl chloride in MW4 are also the result of the presence of landfill gas.

While dissolved methane was discovered in most of the site monitoring wells, the concentrations were relatively low and, therefore, are likely the result of the on-site methanogenesis.

## **4.0 REVISED STATISTICAL EVALUATION APPROACH**

The primary objective of long-term natural attenuation monitoring is to evaluate whether or not the selected site remedy will result in improved groundwater conditions downgradient of the site. Statistical analysis involving comparisons of downgradient groundwater quality to upgradient groundwater quality is the primary mechanism for evaluating whether this objective will be satisfied. The current statistical evaluation plan was designed to be flexible and subject to revision given the presence two known off-site sources that are likely affecting site groundwater quality. This is important because the mathematics used to calculate the COC background standards are based on the assumption that there is a single source. As such, the background standards do not take into account the presence of other sources and are, therefore, subject to statistical failures that could be unrelated to site conditions.

If upgradient groundwater quality degrades due to an off-site source, the background standard must be changed (i.e., raised) because it is reasonable to expect that off-site, upgradient impacts will eventually migrate through the site and degrade groundwater quality in the downgradient wells. Such degradation could be interpreted erroneously as being site-related unless the background standards are revised in an appropriate manner. It should be noted that it could be necessary to recalculate the upgradient background standards numerous times if, as the off-site plume continues to migrate through the site, background groundwater quality degrades further. In essence, the calculated background standards should be reflective of worst-case conditions so that the statistical evaluations will be sensitive to site-related impacts, should they occur, and not off-site upgradient impacts.

### **4.1 Current Statistical Analysis Plan**

The current statistical analysis plan was included in the First Year Annual Report/Technical Memorandum and was subsequently approved by IEPA. The current plan includes a three-phased approach that combines the use of introwell and interwell prediction limits, and confirmation resampling (when necessary) to minimize the effects of possible data anomalies.

The first phase involves a screening step, using introwell comparisons in the three upgradient monitoring wells to evaluate whether or not the upgradient plume is impacting the site. The second phase involves interwell comparisons between each COC in the three downgradient monitoring wells with the pooled upgradient data and confirmation sampling (when necessary). The third phase involves an alternative source demonstration, if appropriate, if there is a downgradient failure(s).

However, as indicated in the IEPA-approved First Year Annual Report/Technical Memorandum:

*"If, however, there is a COC exceedance of a calculated introwell standard, then we will have to reconsider an appropriate course of action. If, for example, only one COC "fails" the introwell test, then possibly statistical analysis can continue with the second phase not including the failed COC...If, however, numerous or all the COCs fail the*

*upgradient intrawell test, then a revision of the statistical approach, or possibly a recalculation of background standards, could be appropriate.” [bold added].*

Strictly speaking, therefore, the intrawell failures in the upgradient wells are indication of the arrival of the off-site plume and suggest that some of the current upgradient background standards and part of the current statistical analysis plan should be revised.

## **4.2 Revised Statistical Analysis Plan**

The revised statistical analysis plan includes recalculated intrawell background standards for each COC/well combination that failed the upgradient intrawell screening, recalculated interwell background standards for the same COCs that failed the upgradient intrawell screening, and a revised evaluation protocol for the downgradient monitoring wells.

### ***4.2.1 Recalculated Intrawell Background Standards***

New intrawell background standards were calculated for 1,1-DCA in MW3 and PCE and TCE in MW6, the specific COC/well combinations that failed the upgradient intrawell screening. Whereas the original standards were based on the first four consecutive quarterly data collection points, the revised standards are based on four consecutive semiannual data collection points including December 2007, June 2008, December 2008, and June 2009. As such, the revised background data set includes the most recent data points that appear to suggest that the off-site plume has arrived. Therefore, the revised calculated intrawell background standards will be more representative of new “plume-affected” background conditions.

### ***4.2.2 Recalculated Interwell Background Standards***

New interwell background standards were also calculated for 1,1-DCA, PCE, and TCE. Since these specific parameters appear to be contained in the arriving off-site plume, then the corresponding background values to which the downgradient wells are compared must be changed. Therefore, the revised calculated interwell background standards will also be more representative of new “plume-affected” background conditions. As with the intrawell standards, the original standards were also based on four consecutive quarterly collection points, and the revised standards are based on four consecutive semiannual data collection points including December 2007, June 2008, December 2008, and June 2009.

### ***4.2.3 Statistical Methods***

The mathematics used to calculate the revised background standards is the same as used to calculate the original standards. The intrawell background values were set at the 99% upper confidence limit of the parametric prediction interval if the background data for a particular parameter had a normal or transformed-normal distribution and contained less than 50% non-detects. Pursuant to USEPA (1989, 1992) guidance, the background standards for parameters having non-normally or transformed-normally distributed data sets or data sets that contain equal to or greater than 50% non-detects are established using non-parametric procedures.

Therefore, the first step in calculating background standards was to evaluate the background data sets for the occurrence of non-detects. Typically, a non-detect is reported by the analytical laboratory as the sample quantitation limit (SQL) preceded by a “less-than” sign (i.e., <) or

followed by the qualifier "U" denoting that the parameter was not detected. If the background data set for a particular parameter includes less than 50% non-detects, the non-detects are replaced with a value equal to one half of the SQL.

The mathematics used to calculate the 99% and the 95% upper confidence limits of the introwell and interwell parametric prediction intervals, respectively, are predicated on the assumption that background data sets have a normal distribution. Therefore, the distribution of the background data was evaluated using the Shapiro-Wilk Test of Normality for those background data sets that contained less than or equal to 50 observations, or the Shapiro-Francia Test of Normality for those background data sets that contained greater than 50 observations (USEPA, 1992). If the raw background data was not normally distributed, the Ladder of Powers (Helsel and Hirsch, 1992) technique was used to transform data and the transformed data sets were then tested for normality. The raw-normal or transformed-normal background data sets were then used to calculate the 95% upper confidence limit of the interwell parametric prediction interval and the 99% upper confidence limit of the introwell parametric prediction interval. Prior to calculating the prediction interval, the sample mean and standard deviation were adjusted according to the Method of Cohen (USEPA, April 1989) if between 15% and 50% of a background data set was below the SQL.

The upper confidence limits of the introwell and interwell parametric prediction were calculated as follows:

$$\bar{x} + t_{(n-1,\alpha)} s \sqrt{1 + \frac{1}{n}}$$

where:

$$\bar{x} = \sum_{i=1}^n \frac{x_i}{n}$$

$$s = \sqrt{\sum_{i=1}^n \frac{(x_i - \bar{x})^2}{n-1}}$$

$\alpha$  is the false positive rate for each individual test. An  $\alpha$  of 0.01 was used for the introwell upper confidence limit. An  $\alpha$  of 0.05 was used for the interwell upper confidence limit.

$t[n-1,\alpha]$  is the one-sided  $(1-\alpha)$  100% point of Student's t distribution based on  $n - 1$  degrees of freedom.

$n$  is the number of background measurements.

If the background data set distribution was not normal or transformed-normal, or contained between 50% and 100% non-detects, non-parametric means were used to establish the prediction intervals. If the background data set for a parameter consisted solely of observations below the

SQL, the prediction interval for that parameter was set at the Practical Quantitation Limit (PQL). Otherwise, the prediction interval was set at the highest concentration detected. Attachment 9 contains information on the interwell analysis and includes a summary of the interwell statistics. Attachment 10 contains information on the intrawell analysis and includes a summary of the intrawell statistics.

#### ***4.2.4 Revised Statistical Approach for MW4***

The current statistical analysis plan includes a second phase evaluation that involves interwell comparisons between each COC in the three downgradient wells with the calculated background standard from the pooled upgradient data.

Given that landfill gas from the Peoples Avenue Landfill is likely impacting groundwater quality in MW4, specifically with respect to 1,1-DCA and vinyl chloride, and that the IEPA has requested that both of these constituents continue to be evaluated as COCs, we think that the statistical evaluation approach for should be modified to minimize the non-site related statistical failures that are likely to continue occurring in MW4.

Therefore, we propose that the second phase evaluation be modified at MW4 to include a combination of interwell and intrawell comparisons, and that a statistical failure at MW4 hereinafter be defined by an exceedance of both the interwell and intrawell background standards, instead of only an exceedance of an interwell standard as is currently the case. A revised statistical evaluation flow chart that is consistent with these comparisons is included as Attachment 11. This will effectively reduce or eliminate the continued statistical failures that are expected in MW4 as a result of the relatively high concentrations of 1,1-DCA and vinyl chloride that are most likely the result of off-site landfill gas influences from the Peoples Avenue Landfill. As discussed previously, dissolved methane was detected in five of the six site monitoring wells, but at concentrations that were at least an order of magnitude less than in MW4. Therefore, it is possible that landfill gas from the Peoples Avenue Landfill may also cause groundwater degradation in other site wells sometime in the future. If this occurs, it may be necessary to further revise the statistical approach as described to apply to other site wells.

## **5.0 SUMMARY AND CONCLUSIONS**

The results of long-term natural attenuation monitoring to date indicate that total (i.e., cumulative) VOC load in the downgradient wells is presently at its lowest concentration since long-term natural attenuation monitoring began, and there does not appear to be any site-related groundwater degradation in either the site monitoring wells or in the river wells. However, based on intrawell background screenings it appears that the off-site, upgradient VOC plume has reached the upgradient monitoring wells, and it is reasonable to assume that the plume will eventually migrate through the site and impact the downgradient monitoring wells.

While methanogenesis is likely occurring, indicating that natural attenuation is active, the relatively high (i.e., anomalous) concentrations of dissolved methane in downgradient well MW4 appear to be the result of landfill gas migration from the Peoples Avenue Landfill. It is likely that the associated relatively high concentrations of 1,1-DCA and vinyl chloride in MW4 are the result of the presence of landfill gas and are not site-related.

Therefore, it is appropriate to revise some of the background groundwater quality standards and the statistical analysis protocol. The specific revisions include:

- recalculated *intrawell* background standard for 1,1-DCA in MW3;
- recalculated *intrawell* background standards for PCE and TCE in MW6;
- recalculated *interwell* background standards for 1,1-DCA, PCE, and TCE;
- statistical failure at MW4 to be defined as an exceedance of both the intrawell and interwell background standards.

We look forward to the IEPA's approval of this report. If you have any questions, please do not hesitate to call me at 630 834-8847.

Sincerely,  
ENVIRONMENTAL INFORMATION LOGISTICS, LLC



A. Michael Hirt, P.G.  
Senior Geologist

## **References**

Helsel, D.R.; Hirsch, R.M.; 1992, *Statistical Methods in Water Resources*. Elsevier.

USEPA, 1976, *Leachate Damage Assessment: Case Study of the Peoples Avenue Landfill Solid Waste Disposal Site in Rockford, Illinois*, EPA/530/SW-517.

USEPA, June 1989, *Interim Final Guidance*, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities. Office of Solid Waste Management Division, United States Environmental Protection Agency, Washington D.C.

USEPA, June 1992, *Addendum to Interim Final Guidance*, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities. Office of Solid Waste Management Division, United States Environmental Protection Agency, Washington D.C.

Vogel et al., 1987, *Transformation of Halogenated Aliphatic Compounds*, Environmental Science Technology, vol. 21, pp. 722-736.

**Attachment 1**

**Site Location and Detail Maps**

**Attachment 2**

**Figure Showing the Locations of the Long-Term Natural Attenuation Monitoring Wells**

**Attachment 3**  
**Laboratory Data Reports**

**Attachment 4**

**Data Summary Table**

**Attachment 5**

**COC Concentration Time Trends**

**Attachment 6**  
**Data Validation Summaries**

**Attachment 7**

**Total VOC Load Concentration Time Trends**

**Attachment 8**

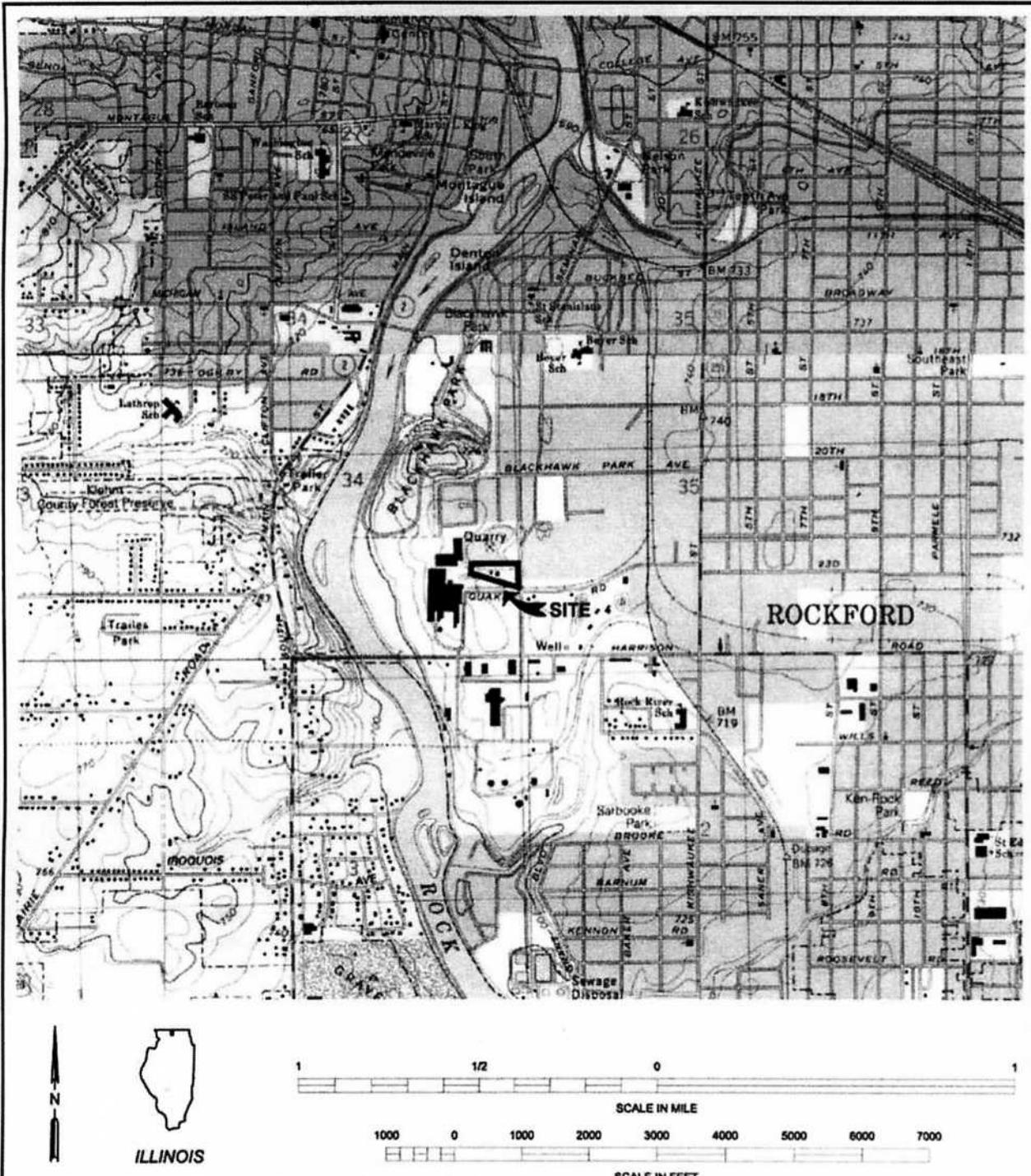
**Original Statistical Evaluation Flow Chart**

**Attachment 9**

**Summary of Revised Interwell and Intrawell Statistical Calculations and Standards**

**Attachment 10**

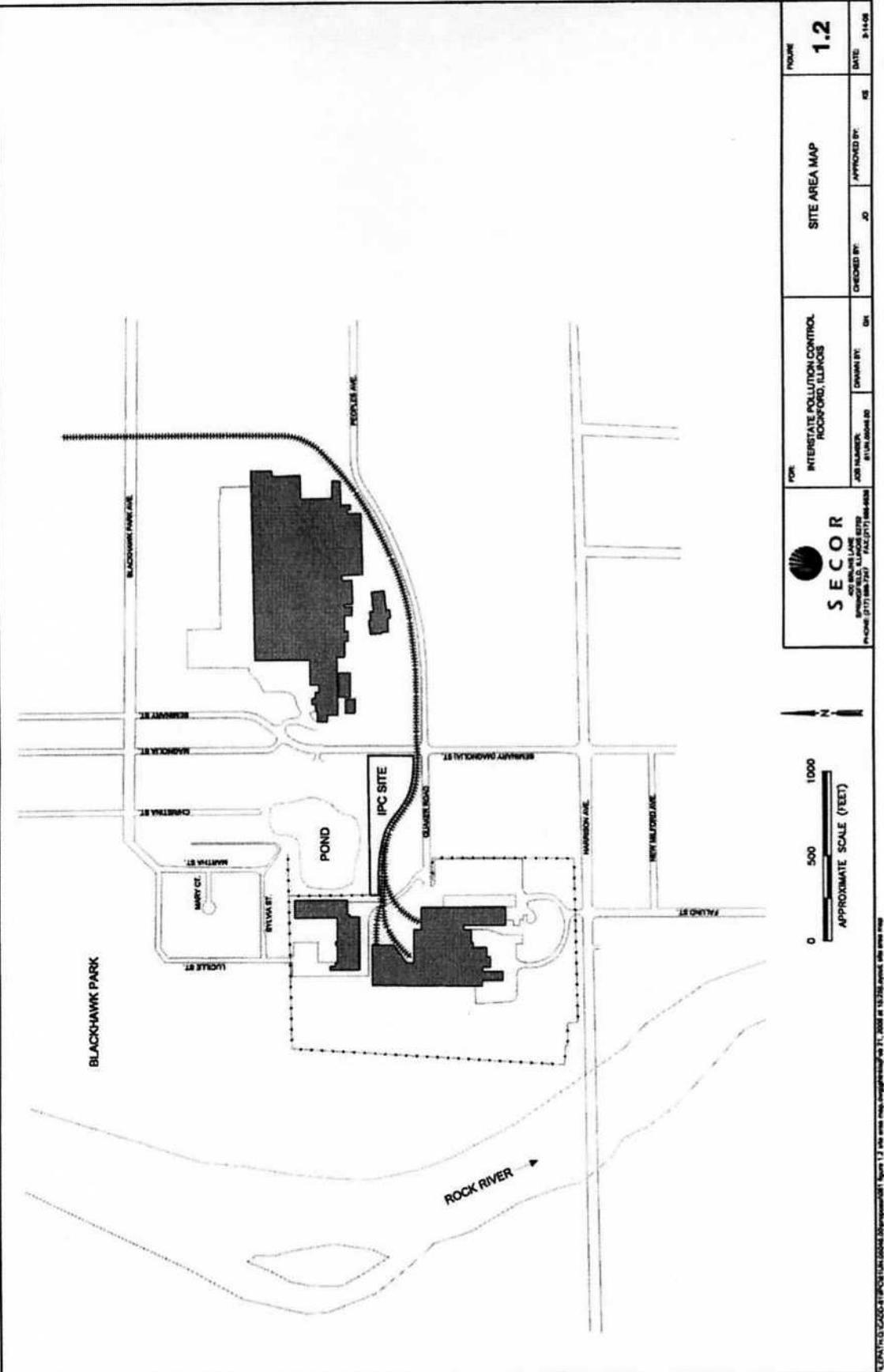
**Revised Statistical Evaluation Flow Chart**



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; Rockford, IL North & South  
Photorevised 1993

 <b>SECOR</b> 400 BRUNS LANE SPRINGFIELD, ILLINOIS 62702 PHONE: (217) 598-7247 FAX: (217) 598-8538	FOR:  INTERSTATE POLLUTION CONTROL ROCKFORD, ILLINOIS	SITE LOCATION MAP				FIGURE
		JOB NUMBER: 61UN.05048.00	DRAWN BY: GH	CHECKED BY: JO	APPROVED BY: KS	DATE: 2-14-06

FILEPATH:Q:\CADD\61VPC\61UN.05048.00\proposal\061 figure 1.1 site location map.dwg[ghinkel]Feb 21, 2006 at 15:26\Layout\site loc



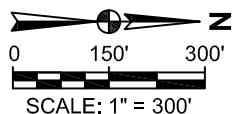


## LEGEND

- - - - - IPC APPROXIMATE SITE BOUNDARY
- MW LONG-TERM NATURAL ATTENUATION MONITORING WELL LOCATIONS

## NOTES

1. AERIAL PHOTO PROVIDED BY WINNEBAGO COUNTY GEOGRAPHIC INFORMATION SYSTEM (WINGIS).



SCALE: 1" = 300'

PREPARED BY



PREPARED FOR

INTERSTATE  
POLLUTION  
CONTROL

070309

**FIGURE 1**  
**LONG-TERM NATURAL ATTENUATION**  
**MONITORING WELL LOCATIONS**  
INTERSTATE POLLUTION CONTROL  
ROCKFORD, ILLINOIS

JULY 2009

## ANALYTICAL REPORT

Job Number: 500-15867-1

Job Description: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Attention: Ms. Mary Pearson



Approved for release.  
Richard C Wright  
Project Manager II  
12/17/2008 11:01 AM

Richard C Wright  
Project Manager II  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)  
12/17/2008

These test results meet all the requirements of NELAC for accredited parameters.

The Lab Certification ID# is 100201.

All questions regarding this test report should be directed to the TestAmerica Project Manager whose signature appears on this report. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Chicago 2417 Bond Street, University Park, IL 60466

Tel (708) 534-5200 Fax (708) 534-5211 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative  
500-J15867-1**

**Comments**

No additional comments.

**Receipt**

Although not indicated on the COC, extra volume was provided for MS/MSD for sample 4.

All other samples were received in good condition within temperature requirements.

**GC/MS VOA**

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 54076 were outside control limits. The associated laboratory control standard (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>500-15867-1 IPCGWMW6</b>					
Vinyl chloride	24	2.0	ug/L	8260B	
1,1-Dichloroethene	15	5.0	ug/L	8260B	
1,1-Dichloroethane	6.8	5.0	ug/L	8260B	
cis-1,2-Dichloroethene	200	50	ug/L	8260B	
1,1,1-Trichloroethane	22	5.0	ug/L	8260B	
Trichloroethene	32	5.0	ug/L	8260B	
Tetrachloroethene	6.1	5.0	ug/L	8260B	
<b>500-15867-2 IPCGWMW5</b>					
Vinyl chloride	7.7	2.0	ug/L	8260B	
1,1-Dichloroethene	27	5.0	ug/L	8260B	
1,1-Dichloroethane	8.8	5.0	ug/L	8260B	
cis-1,2-Dichloroethene	250	50	ug/L	8260B	
1,1,1-Trichloroethane	35	5.0	ug/L	8260B	
Trichloroethene	200	50	ug/L	8260B	
Tetrachloroethene	29	5.0	ug/L	8260B	
<b>500-15867-3 IPCGWMW4</b>					
Vinyl chloride	65	2.0	ug/L	8260B	
1,1-Dichloroethene	14	5.0	ug/L	8260B	
1,1-Dichloroethane	13	5.0	ug/L	8260B	
cis-1,2-Dichloroethene	190	50	ug/L	8260B	
1,1,1-Trichloroethane	21	5.0	ug/L	8260B	
<b>500-15867-4 IPCGWMW2</b>					
Vinyl chloride	4.5	2.0	ug/L	8260B	
1,1-Dichloroethene	17	5.0	ug/L	8260B	
cis-1,2-Dichloroethene	52	5.0	ug/L	8260B	
1,1,1-Trichloroethane	21	5.0	ug/L	8260B	
Trichloroethene	230	50	ug/L	8260B	
Tetrachloroethene	23	5.0	ug/L	8260B	
<b>500-15867-5 IPCGWMW1</b>					
Vinyl chloride	7.3	2.0	ug/L	8260B	
1,1-Dichloroethene	14	5.0	ug/L	8260B	
1,1-Dichloroethane	13	5.0	ug/L	8260B	
cis-1,2-Dichloroethene	230	50	ug/L	8260B	
1,1,1-Trichloroethane	9.4	5.0	ug/L	8260B	
Trichloroethene	45	5.0	ug/L	8260B	

## EXECUTIVE SUMMARY - Detections

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>500-15867-6      IPCGWMW3</b>					
1,1-Dichloroethene		17	5.0	ug/L	8260B
cis-1,2-Dichloroethene		50	5.0	ug/L	8260B
1,1,1-Trichloroethane		22	5.0	ug/L	8260B
Trichloroethene		230	50	ug/L	8260B
Tetrachloroethene		25	5.0	ug/L	8260B
<b>500-15867-7      IPCGWMW7</b>					
Vinyl chloride		7.2	2.0	ug/L	8260B
1,1-Dichloroethene		13	5.0	ug/L	8260B
1,1-Dichloroethane		13	5.0	ug/L	8260B
cis-1,2-Dichloroethene		200	50	ug/L	8260B
1,1,1-Trichloroethane		7.9	5.0	ug/L	8260B
Trichloroethene		33	5.0	ug/L	8260B

## METHOD SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS) Purge and Trap	TAL CHI TAL CHI	SW846 8260B SW846 5030B	

**Lab References:**

TAL CHI = TestAmerica Chicago

**Method References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## SAMPLE SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
500-15867-1	IPCGWMW6	Water	12/08/2008 1106	12/09/2008 1030
500-15867-2	IPCGWMW5	Water	12/08/2008 1204	12/09/2008 1030
500-15867-3	IPCGWMW4	Water	12/08/2008 1233	12/09/2008 1030
500-15867-4	IPCGWMW2	Water	12/08/2008 1305	12/09/2008 1030
500-15867-4MS	IPCGWMW2	Water	12/08/2008 1305	12/09/2008 1030
500-15867-4MSD	IPCGWMW2	Water	12/08/2008 1305	12/09/2008 1030
500-15867-5	IPCGWMW1	Water	12/08/2008 1339	12/09/2008 1030
500-15867-6	IPCGWMW3	Water	12/08/2008 1415	12/09/2008 1030
500-15867-7	IPCGWMW7	Water	12/08/2008 1445	12/09/2008 1030
500-15867-8	IPCFB	Water	12/08/2008 1500	12/09/2008 1030
500-15867-9	Trip Blank	Water	12/08/2008 0000	12/09/2008 1030

# **SAMPLE RESULTS**

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW6  
**Lab Sample ID:** 500-15867-1

Date Sampled: 12/08/2008 1106  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/11/2008	1442
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008	1442
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	24	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	15	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	6.8	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	22	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	32	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	6.1	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	123	%		70 - 125	
Toluene-d8 (Surr)	96	%		75 - 120	
4-Bromofluorobenzene (Surr)	97	%		75 - 120	
Dibromofluoromethane	105	%		75 - 120	

Ms. Mary Pearson  
Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW6  
**Lab Sample ID:** 500-15867-1

Date Sampled: 12/08/2008 1106  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B Run Type: DL</b>			Date Analyzed:	12/15/2008 1513	
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008 1513	
cis-1,2-Dichloroethene	200	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	109	%		70 - 125	
Toluene-d8 (Surr)	99	%		75 - 120	
4-Bromofluorobenzene (Surr)	94	%		75 - 120	
Dibromofluoromethane	103	%		75 - 120	

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW5  
**Lab Sample ID:** 500-15867-2

Date Sampled: 12/08/2008 1204  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/15/2008 1537	
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008 1537	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	7.7	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	27	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	8.8	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	35	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	29	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate					Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110	%		70 - 125	
Toluene-d8 (Surr)	99	%		75 - 120	
4-Bromofluorobenzene (Surr)	90	%		75 - 120	
Dibromofluoromethane	103	%		75 - 120	

**Method: 8260B Run Type: DL**

Date Analyzed: 12/11/2008 1528

Ms. Mary Pearson  
Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW5  
**Lab Sample ID:** 500-15867-2

Date Sampled: 12/08/2008 1204  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008	1528
cis-1,2-Dichloroethene	250	ug/L	2.1	50	10
Trichloroethene	200	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	122	%		70 - 125	
Toluene-d8 (Surr)	95	%		75 - 120	
4-Bromofluorobenzene (Surr)	99	%		75 - 120	
Dibromofluoromethane	108	%		75 - 120	

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW4  
**Lab Sample ID:** 500-15867-3

Date Sampled: 12/08/2008 1233  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/15/2008	1600
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008	1600
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	65	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	14	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	13	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	21	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	112	%		70 - 125	
Toluene-d8 (Surr)	98	%		75 - 120	
4-Bromofluorobenzene (Surr)	101	%		75 - 120	
Dibromofluoromethane	103	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW4  
**Lab Sample ID:** 500-15867-3

Date Sampled: 12/08/2008 1233  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B Run Type: DL</b>			Date Analyzed:	12/15/2008 1623	
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008 1623	
cis-1,2-Dichloroethene	190	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	112	%		70 - 125	
Toluene-d8 (Surr)	99	%		75 - 120	
4-Bromofluorobenzene (Surr)	98	%		75 - 120	
Dibromofluoromethane	109	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW2  
**Lab Sample ID:** 500-15867-4

Date Sampled: 12/08/2008 1305  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/11/2008 1615	
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008 1615	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	4.5	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	17	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	52	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	21	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	23	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate					Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	124	%		70 - 125	
Toluene-d8 (Surr)	95	%		75 - 120	
4-Bromofluorobenzene (Surr)	99	%		75 - 120	
Dibromofluoromethane	108	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW2  
**Lab Sample ID:** 500-15867-4

Date Sampled: 12/08/2008 1305  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B Run Type: DL</b>			Date Analyzed:	12/15/2008 1646	
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008 1646	
Trichloroethene	230	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	110	%		70 - 125	
Toluene-d8 (Surr)	102	%		75 - 120	
4-Bromofluorobenzene (Surr)	100	%		75 - 120	
Dibromofluoromethane	111	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW1  
**Lab Sample ID:** 500-15867-5

Date Sampled: 12/08/2008 1339  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/11/2008	1748
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008	1748
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	7.3	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	14	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	13	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	9.4	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	45	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	121	%		70 - 125	
Toluene-d8 (Surr)	94	%		75 - 120	
4-Bromofluorobenzene (Surr)	104	%		75 - 120	
Dibromofluoromethane	103	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW1  
**Lab Sample ID:** 500-15867-5

Date Sampled: 12/08/2008 1339  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B Run Type: DL</b>			Date Analyzed:	12/15/2008 1710	
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008 1710	
cis-1,2-Dichloroethene	230	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	114	%		70 - 125	
Toluene-d8 (Surr)	101	%		75 - 120	
4-Bromofluorobenzene (Surr)	98	%		75 - 120	
Dibromofluoromethane	109	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW3  
**Lab Sample ID:** 500-15867-6

Date Sampled: 12/08/2008 1415  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/11/2008 1812	
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008 1812	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	17	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	50	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	22	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	25	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate					Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	121	%		70 - 125	
Toluene-d8 (Surr)	97	%		75 - 120	
4-Bromofluorobenzene (Surr)	96	%		75 - 120	
Dibromofluoromethane	107	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW3  
**Lab Sample ID:** 500-15867-6

Date Sampled: 12/08/2008 1415  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B Run Type: DL</b>			Date Analyzed:	12/11/2008 1835	
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008 1835	
Trichloroethene	230	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	118	%		70 - 125	
Toluene-d8 (Surr)	95	%		75 - 120	
4-Bromofluorobenzene (Surr)	94	%		75 - 120	
Dibromofluoromethane	103	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW7  
**Lab Sample ID:** 500-15867-7

Date Sampled: 12/08/2008 1445  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/11/2008 1859	
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008 1859	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	7.2	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	13	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	13	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	7.9	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	33	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate					Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	121	%		70 - 125	
Toluene-d8 (Surr)	95	%		75 - 120	
4-Bromofluorobenzene (Surr)	103	%		75 - 120	
Dibromofluoromethane	105	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCGWMW7  
**Lab Sample ID:** 500-15867-7

Date Sampled: 12/08/2008 1445  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	12/15/2008 1734	
<b>Prep Method:</b> 5030B			Date Prepared:	12/15/2008 1734	
cis-1,2-Dichloroethene	200	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	114	%		70 - 125	
Toluene-d8 (Surr)	99	%		75 - 120	
4-Bromofluorobenzene (Surr)	95	%		75 - 120	
Dibromofluoromethane	105	%		75 - 120	

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Job Number: 500-15867-1

**Client Sample ID:** IPCFB  
**Lab Sample ID:** 500-15867-8

Date Sampled: 12/08/2008 1500  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/15/2008 1758	
<b>Prep Method: 5030B</b>			Date Prepared:	12/15/2008 1758	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	109	%		70 - 125	
Toluene-d8 (Surr)	96	%		75 - 120	
4-Bromofluorobenzene (Surr)	95	%		75 - 120	

Ms. Mary Pearson  
Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** IPCFB  
**Lab Sample ID:** 500-15867-8

Date Sampled: 12/08/2008 1500  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	108	%		75 - 120	Acceptance Limits

Ms. Mary Pearson  
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 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** Trip Blank  
**Lab Sample ID:** 500-15867-9

Date Sampled: 12/08/2008 0000  
 Date Received: 12/09/2008 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	12/11/2008	1945
<b>Prep Method: 5030B</b>			Date Prepared:	12/11/2008	1945
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	121	%		70 - 125	
Toluene-d8 (Surr)	96	%		75 - 120	
4-Bromofluorobenzene (Surr)	101	%		75 - 120	

Ms. Mary Pearson  
Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Job Number: 500-15867-1

**Client Sample ID:** Trip Blank  
**Lab Sample ID:** 500-15867-9

Date Sampled: 12/08/2008 0000  
Date Received: 12/09/2008 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	110	%		75 - 120	Acceptance Limits

## DATA REPORTING QUALIFIERS

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
GC/MS VOA	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	E	Result exceeded calibration range, secondary dilution required.
	F	RPD of the MS and MSD exceeds the control limits

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:500-54076</b>					
LCS 500-54076/5	Lab Control Spike	T	Water	8260B	
LCSD 500-54076/13	Lab Control Spike Duplicate	T	Water	8260B	
MB 500-54076/4	Method Blank	T	Water	8260B	
500-15867-1	IPCGWMW6	T	Water	8260B	
500-15867-2DL	IPCGWMW5	T	Water	8260B	
500-15867-4	IPCGWMW2	T	Water	8260B	
500-15867-4MS	Matrix Spike	T	Water	8260B	
500-15867-4MSD	Matrix Spike Duplicate	T	Water	8260B	
500-15867-5	IPCGWMW1	T	Water	8260B	
500-15867-6	IPCGWMW3	T	Water	8260B	
500-15867-6DL	IPCGWMW3	T	Water	8260B	
500-15867-7	IPCGWMW7	T	Water	8260B	
500-15867-9	Trip Blank	T	Water	8260B	
<b>Analysis Batch:500-54341</b>					
LCS 500-54341/12	Lab Control Spike	T	Water	8260B	
LCSD 500-54341/30	Lab Control Spike Duplicate	T	Water	8260B	
MB 500-54341/11	Method Blank	T	Water	8260B	
500-15867-1DL	IPCGWMW6	T	Water	8260B	
500-15867-2	IPCGWMW5	T	Water	8260B	
500-15867-3	IPCGWMW4	T	Water	8260B	
500-15867-3DL	IPCGWMW4	T	Water	8260B	
500-15867-4DL	IPCGWMW2	T	Water	8260B	
500-15867-5DL	IPCGWMW1	T	Water	8260B	
500-15867-7DL	IPCGWMW7	T	Water	8260B	
500-15867-8	IPCFB	T	Water	8260B	

#### Report Basis

T = Total

**Surrogate Recovery Report****8260B Volatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec	DBFM %Rec
500-15867-1	IPCGWMW6	123	96	97	105
500-15867-1 DL	IPCGWMW6 DL	109	99	94	103
500-15867-2 DL	IPCGWMW5 DL	122	95	99	108
500-15867-2	IPCGWMW5	110	99	90	103
500-15867-3	IPCGWMW4	112	98	101	103
500-15867-3 DL	IPCGWMW4 DL	112	99	98	109
500-15867-4	IPCGWMW2	124	95	99	108
500-15867-4 DL	IPCGWMW2 DL	110	102	100	111
500-15867-5	IPCGWMW1	121	94	104	103
500-15867-5 DL	IPCGWMW1 DL	114	101	98	109
500-15867-6	IPCGWMW3	121	97	96	107
500-15867-6 DL	IPCGWMW3 DL	118	95	94	103
500-15867-7	IPCGWMW7	121	95	103	105
500-15867-7 DL	IPCGWMW7 DL	114	99	95	105
500-15867-8	IPCFB	109	96	95	108
500-15867-9	Trip Blank	121	96	101	110
MB 500-54076/4		120	99	97	105
MB 500-54341/11		104	101	99	99
LCS 500-54076/5		114	99	114	101
LCS 500-54341/12		106	101	104	101
LCSD 500-54076/13		117	98	107	104
LCSD 500-54341/30		105	101	104	110
500-15867-4 MS	IPCGWMW2 MS	116	97	104	97
500-15867-4 MSD	IPCGWMW2 MSD	118	97	110	107

**Surrogate****Acceptance Limits**

12DCE = 1,2-Dichloroethane-d4 (Surr)	70-125
TOL = Toluene-d8 (Surr)	75-120
BFB = 4-Bromofluorobenzene (Surr)	75-120
DBFM = Dibromofluoromethane	75-120

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### **Method Blank - Batch: 500-54076**

Lab Sample ID: MB 500-54076/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 12/11/2008 0858  
 Date Prepared: 12/11/2008 0858

Analysis Batch: 500-54076  
 Prep Batch: N/A  
 Units: ug/L

### **Method: 8260B Preparation: 5030B**

Instrument ID: Agilent 6890N GC - 5973N  
 Lab File ID: 2M1211.D  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	RL
Benzene	<5.0		0.16	5.0
Chloromethane	<5.0		0.33	5.0
Vinyl chloride	<2.0		0.23	2.0
Bromomethane	<5.0		0.44	5.0
Chloroethane	<5.0		0.45	5.0
1,1-Dichloroethene	<5.0		0.22	5.0
Carbon disulfide	<5.0		0.39	5.0
Acetone	<20		1.2	20
Methylene Chloride	<10		0.99	10
trans-1,2-Dichloroethene	<5.0		0.17	5.0
1,1-Dichloroethane	<5.0		0.18	5.0
cis-1,2-Dichloroethene	<5.0		0.21	5.0
Methyl Ethyl Ketone	<20		0.83	20
Chloroform	<5.0		0.13	5.0
1,1,1-Trichloroethane	<5.0		0.23	5.0
Carbon tetrachloride	<5.0		0.21	5.0
1,2-Dichloroethane	<5.0		0.22	5.0
Trichloroethene	<5.0		0.20	5.0
1,2-Dichloropropane	<5.0		0.23	5.0
Bromodichloromethane	<5.0		0.18	5.0
cis-1,3-Dichloropropene	<5.0		0.16	5.0
methyl isobutyl ketone	<20		0.58	20
Toluene	<5.0		0.16	5.0
trans-1,3-Dichloropropene	<5.0		0.13	5.0
1,1,2-Trichloroethane	<5.0		0.32	5.0
Tetrachloroethene	<5.0		0.14	5.0
2-Hexanone	<20		0.77	20
Dibromochloromethane	<5.0		0.19	5.0
Chlorobenzene	<5.0		0.17	5.0
Ethylbenzene	<5.0		0.17	5.0
Styrene	<5.0		0.15	5.0
Bromoform	<5.0		0.30	5.0
1,1,2,2-Tetrachloroethane	<5.0		0.25	5.0
Xylenes, Total	<5.0		0.33	5.0
<hr/>				
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	120		70 - 125	
Toluene-d8 (Surr)	99		75 - 120	
4-Bromofluorobenzene (Surr)	97		75 - 120	
Dibromofluoromethane	105		75 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 500-54076**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 500-54076/5	Analysis Batch: 500-54076	Instrument ID: Agilent 6890N GC - 5973N
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 2S1211.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 12/11/2008 0922		Final Weight/Volume: 10 mL
Date Prepared: 12/11/2008 0922		

LCSD Lab Sample ID: LCSD 500-54076/13	Analysis Batch: 500-54076	Instrument ID: Agilent 6890N GC - 5973
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 2T1211.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 12/11/2008 2008		Final Weight/Volume: 10 mL
Date Prepared: 12/11/2008 2008		

Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	84	78	74 - 120	6	20		
Chloromethane	94	94	38 - 148	0	20		
Vinyl chloride	111	104	49 - 140	7	20		
Bromomethane	98	97	56 - 157	1	20		
Chloroethane	86	85	56 - 140	1	20		
1,1-Dichloroethene	80	72	55 - 121	11	20		
Carbon disulfide	70	63	38 - 135	10	20		
Acetone	105	88	10 - 175	17	20		
Methylene Chloride	81	80	65 - 126	1	20		
trans-1,2-Dichloroethene	81	76	69 - 120	6	20		
1,1-Dichloroethane	81	77	69 - 120	5	20		
cis-1,2-Dichloroethene	87	87	76 - 124	0	20		
Methyl Ethyl Ketone	84	94	28 - 160	11	20		
Chloroform	89	89	70 - 120	0	20		
1,1,1-Trichloroethane	90	87	68 - 125	3	20		
Carbon tetrachloride	102	89	61 - 128	14	20		
1,2-Dichloroethane	102	101	71 - 120	1	20		
Trichloroethene	98	91	69 - 120	8	20		
1,2-Dichloropropane	93	87	75 - 120	7	20		
Bromodichloromethane	103	101	79 - 134	2	20		
cis-1,3-Dichloropropene	90	87	64 - 120	4	20		
methyl isobutyl ketone	99	106	38 - 172	6	20		
Toluene	95	89	78 - 120	6	20		
trans-1,3-Dichloropropene	95	93	65 - 120	2	20		
1,1,2-Trichloroethane	90	98	74 - 123	9	20		
Tetrachloroethene	103	93	65 - 120	11	20		
2-Hexanone	117	109	39 - 158	7	20		
Dibromochloromethane	108	106	78 - 126	2	20		
Chlorobenzene	97	90	78 - 120	7	20		
Ethylbenzene	98	91	79 - 120	8	20		
Styrene	102	95	80 - 121	8	20		
Bromoform	113	109	58 - 122	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### Lab Control Spike/

### Lab Control Spike Duplicate Recovery Report - Batch: 500-54076

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID: LCS 500-54076/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/11/2008 0922  
Date Prepared: 12/11/2008 0922

Analysis Batch: 500-54076  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890N GC - 5973N  
Lab File ID: 2S1211.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 500-54076/13  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/11/2008 2008  
Date Prepared: 12/11/2008 2008

Analysis Batch: 500-54076  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890N GC - 5973  
Lab File ID: 2T1211.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,1,2,2-Tetrachloroethane	88	89	71 - 120	0	20		
Xylenes, Total	99	91	78 - 120	9	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	114		117		70 - 125		
Toluene-d8 (Surr)	99		98		75 - 120		
4-Bromofluorobenzene (Surr)	114		107		75 - 120		
Dibromofluoromethane	101		104		75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 500-54076**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID:	500-15867-4	Analysis Batch:	500-54076	Instrument ID:	Agilent 6890N GC - 5973I
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	5867-04S.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	12/11/2008 1702			Final Weight/Volume:	10 mL
Date Prepared:	12/11/2008 1702				
MSD Lab Sample ID:	500-15867-4	Analysis Batch:	500-54076	Instrument ID:	Agilent 6890N GC - 5973N
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	5867-04T.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	12/11/2008 1725			Final Weight/Volume:	10 mL
Date Prepared:	12/11/2008 1725				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	81	80	74 - 120	1	20		
Chloromethane	79	99	38 - 148	22	20		F
Vinyl chloride	84	110	49 - 140	22	20		F
Bromomethane	77	103	56 - 157	28	20		F
Chloroethane	72	92	56 - 140	24	20		F
1,1-Dichloroethene	59	74	55 - 121	11	20		
Carbon disulfide	61	68	38 - 135	11	20		
Acetone	73	88	10 - 175	19	20		
Methylene Chloride	74	84	65 - 126	12	20		
trans-1,2-Dichloroethene	77	85	69 - 120	10	20		
1,1-Dichloroethane	75	83	69 - 120	9	20		
cis-1,2-Dichloroethene	62	90	76 - 124	10	20	F	
Methyl Ethyl Ketone	74	96	28 - 160	27	20		F
Chloroform	88	96	70 - 120	9	20		
1,1,1-Trichloroethane	78	95	68 - 125	9	20		
Carbon tetrachloride	92	95	61 - 128	3	20		
1,2-Dichloroethane	108	106	71 - 120	3	20		
Trichloroethene	41	15	69 - 120	3	20	E 4	E 4
1,2-Dichloropropane	89	91	75 - 120	2	20		
Bromodichloromethane	104	106	79 - 134	2	20		
cis-1,3-Dichloropropene	88	89	64 - 120	0	20		
methyl isobutyl ketone	107	115	38 - 172	7	20		
Toluene	90	90	78 - 120	0	20		
trans-1,3-Dichloropropene	95	95	65 - 120	1	20		
1,1,2-Trichloroethane	93	96	74 - 123	3	20		
Tetrachloroethene	102	101	65 - 120	1	20		
2-Hexanone	123	120	39 - 158	3	20		
Dibromochloromethane	112	112	78 - 126	0	20		
Chlorobenzene	93	93	78 - 120	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 500-54076

Method: 8260B  
Preparation: 5030B

MS Lab Sample ID: 500-15867-4      Analysis Batch: 500-54076  
Client Matrix: Water      Prep Batch: N/A  
Dilution: 1.0  
Date Analyzed: 12/11/2008 1702  
Date Prepared: 12/11/2008 1702

Instrument ID: Agilent 6890N GC - 5973I  
Lab File ID: 5867-04S.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 500-15867-4      Analysis Batch: 500-54076  
Client Matrix: Water      Prep Batch: N/A  
Dilution: 1.0  
Date Analyzed: 12/11/2008 1725  
Date Prepared: 12/11/2008 1725

Instrument ID: Agilent 6890N GC - 5973N  
Lab File ID: 5867-04T.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ethylbenzene	95	95	79 - 120	0	20		
Styrene	97	97	80 - 121	0	20		
Bromoform	116	121	58 - 122	5	20		
1,1,2,2-Tetrachloroethane	91	96	71 - 120	5	20		
Xylenes, Total	94	95	78 - 120	1	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	116		118		70 - 125		
Toluene-d8 (Surr)	97		97		75 - 120		
4-Bromofluorobenzene (Surr)	104		110		75 - 120		
Dibromofluoromethane	97		107		75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### **Method Blank - Batch: 500-54341**

Lab Sample ID: MB 500-54341/11  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 12/15/2008 0857  
 Date Prepared: 12/15/2008 0857

Analysis Batch: 500-54341  
 Prep Batch: N/A  
 Units: ug/L

### **Method: 8260B Preparation: 5030B**

Instrument ID: Agilent 6890N GC - 5973N  
 Lab File ID: 2M1215.D  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	RL
Benzene	<5.0		0.16	5.0
Chloromethane	<5.0		0.33	5.0
Vinyl chloride	<2.0		0.23	2.0
Bromomethane	<5.0		0.44	5.0
Chloroethane	<5.0		0.45	5.0
1,1-Dichloroethene	<5.0		0.22	5.0
Carbon disulfide	<5.0		0.39	5.0
Acetone	<20		1.2	20
Methylene Chloride	<10		0.99	10
trans-1,2-Dichloroethene	<5.0		0.17	5.0
1,1-Dichloroethane	<5.0		0.18	5.0
cis-1,2-Dichloroethene	<5.0		0.21	5.0
Methyl Ethyl Ketone	<20		0.83	20
Chloroform	<5.0		0.13	5.0
1,1,1-Trichloroethane	<5.0		0.23	5.0
Carbon tetrachloride	<5.0		0.21	5.0
1,2-Dichloroethane	<5.0		0.22	5.0
Trichloroethene	<5.0		0.20	5.0
1,2-Dichloropropane	<5.0		0.23	5.0
Bromodichloromethane	<5.0		0.18	5.0
cis-1,3-Dichloropropene	<5.0		0.16	5.0
methyl isobutyl ketone	<20		0.58	20
Toluene	<5.0		0.16	5.0
trans-1,3-Dichloropropene	<5.0		0.13	5.0
1,1,2-Trichloroethane	<5.0		0.32	5.0
Tetrachloroethene	<5.0		0.14	5.0
2-Hexanone	<20		0.77	20
Dibromochloromethane	<5.0		0.19	5.0
Chlorobenzene	<5.0		0.17	5.0
Ethylbenzene	<5.0		0.17	5.0
Styrene	<5.0		0.15	5.0
Bromoform	<5.0		0.30	5.0
1,1,2,2-Tetrachloroethane	<5.0		0.25	5.0
Xylenes, Total	<5.0		0.33	5.0
<hr/>				
Surrogate	% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	104	70 - 125		
Toluene-d8 (Surr)	101	75 - 120		
4-Bromofluorobenzene (Surr)	99	75 - 120		
Dibromofluoromethane	99	75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 500-54341**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 500-54341/12	Analysis Batch: 500-54341	Instrument ID: Agilent 6890N GC - 5973N
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 2S1215.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 12/15/2008 0922		Final Weight/Volume: 10 mL
Date Prepared: 12/15/2008 0922		

LCSD Lab Sample ID: LCSD 500-54341/30	Analysis Batch: 500-54341	Instrument ID: Agilent 6890N GC - 5973D
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 2T1215.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 12/15/2008 1844		Final Weight/Volume: 10 mL
Date Prepared: 12/15/2008 1844		

Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	79	76	74 - 120	3	20		
Chloromethane	68	76	38 - 148	11	20		
Vinyl chloride	94	95	49 - 140	1	20		
Bromomethane	92	100	56 - 157	8	20		
Chloroethane	84	86	56 - 140	3	20		
1,1-Dichloroethene	68	67	55 - 121	2	20		
Carbon disulfide	55	56	38 - 135	1	20		
Acetone	76	75	10 - 175	2	20		
Methylene Chloride	77	81	65 - 126	4	20		
trans-1,2-Dichloroethene	78	78	69 - 120	0	20		
1,1-Dichloroethane	76	76	69 - 120	1	20		
cis-1,2-Dichloroethene	87	88	76 - 124	2	20		
Methyl Ethyl Ketone	74	71	28 - 160	3	20		
Chloroform	86	89	70 - 120	4	20		
1,1,1-Trichloroethane	87	89	68 - 125	3	20		
Carbon tetrachloride	88	82	61 - 128	7	20		
1,2-Dichloroethane	89	86	71 - 120	4	20		
Trichloroethene	90	83	69 - 120	8	20		
1,2-Dichloropropane	88	85	75 - 120	4	20		
Bromodichloromethane	96	93	79 - 134	4	20		
cis-1,3-Dichloropropene	86	85	64 - 120	1	20		
methyl isobutyl ketone	80	72	38 - 172	10	20		
Toluene	92	87	78 - 120	5	20		
trans-1,3-Dichloropropene	91	85	65 - 120	7	20		
1,1,2-Trichloroethane	94	95	74 - 123	1	20		
Tetrachloroethene	90	85	65 - 120	7	20		
2-Hexanone	90	79	39 - 158	13	20		
Dibromochloromethane	98	88	78 - 126	10	20		
Chlorobenzene	93	86	78 - 120	9	20		
Ethylbenzene	99	87	79 - 120	12	20		
Styrene	99	90	80 - 121	10	20		
Bromoform	101	95	58 - 122	5	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

### Lab Control Spike/

### Lab Control Spike Duplicate Recovery Report - Batch: 500-54341

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID: LCS 500-54341/12  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/15/2008 0922  
Date Prepared: 12/15/2008 0922

Analysis Batch: 500-54341  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890N GC - 5973N  
Lab File ID: 2S1215.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 500-54341/30  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/15/2008 1844  
Date Prepared: 12/15/2008 1844

Analysis Batch: 500-54341  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890N GC - 5973D  
Lab File ID: 2T1215.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,1,2,2-Tetrachloroethane	99	85	71 - 120	16	20		
Xylenes, Total	97	89	78 - 120	9	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	106		105		70 - 125		
Toluene-d8 (Surr)	101		101		75 - 120		
4-Bromofluorobenzene (Surr)	104		104		75 - 120		
Dibromofluoromethane	101		110		75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

24-17 Bond Street, University Park, IL 60466  
Phone: 708-534-5200 Fax: 708-534-5211

Phone: 630 883 48847

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

(optional)

(optional)

## Chain of Custody Record

Lab Job #: 500 - 1586 T00

Date: 12/17/2000

Chain of Custody Number: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Report To:	Mike Hart
Contact:	EL
Company:	EL
Address:	_____
Address:	_____
Phone:	630 883 48847
Fax:	_____
E-Mail:	_____

Bill To:	_____
Contact:	_____
Company:	_____
Address:	_____
Address:	_____
Phone:	_____
Fax:	_____

Temperature °C or Color:	4.5
Comments:	Preservative Key
	1. HCl, Cool to 4°
	2. HgCl2, Cool to 4°
	3. HNO3, Cool to 4°
	4. NaOH, Cool to 4°
	5. NaOH/Zn, Cool to 4°
	6. Cool to 4°
	7. None
	8. Other

Client:	IPC/EI
Client Project #:	_____
Project Name:	IPC Rockford
Project Location/State:	Rockford IL
Lab Project #:	Lab PH
Sampler:	Brian McQueen

Comments:	PO# Reference
-----------	---------------

Lab ID	MS/MSO	Sample ID	Sampling		Parameter	# of Containers	Matrix	Comments
			Date	Time				
1	IPC MW-GW MW6	12808	11/06	3	GW	3	GW	
2	IPC GW MW5		1204	3		1		
3	IPC GW MW4		1233	3		1		
4	IPC GW MW2		1305	9		1		
5	IPC GW MW1		1339	3		1		
6	IPC GW MW3		1415	3		1		
7	IPC GW MW7		1445	3		1		
8	IPC FB		1500	3		1		
9	Trip Blank							Not added back

Turnaround Time Required (Business Days):

\_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 10 days \_\_\_ 15 Days \_\_\_ Other \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months  
 (A fee may be assessed if samples are retained longer than 1 month)

Submitted By:	John Cebens	Date:	12/08/08	Time:	15:30	Received By:	TEST America	Date:	12/09/08	Time:	10:30
Reinstituted By:	_____	Company:	_____	Company:	_____	Received By:	_____	Company:	_____	Date:	_____
Reinstituted By:	_____	Company:	_____	Time:	_____	Received By:	_____	Company:	_____	Date:	_____

Matrix Key	Lab Counter
WW - Wastewater	Shipped
W - Water	Hand Delivered
S - Soil	_____
S - Sludge	_____
L - Leachate	_____
Wl - Waste	_____
MS - Miscellaneous	_____
OL - OI	_____
O - Other	_____

## Login Sample Receipt Check List

Client: Environmental Information Logistics (EIL)

Job Number: 500-15867-1

**Login Number: 15867**

**List Source: TestAmerica Chicago**

**Creator: Kelsey, Shawn M**

**List Number: 1**

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

## ANALYTICAL REPORT

Job Number: 500-19494-1

Job Description: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Attention: Ms. Mary Pearson



Approved for release.  
Cindy R Pritchard  
Project Mgmt. Assistant  
6/22/2009 3:00 PM

Designee for  
Richard C Wright  
Project Manager II  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)  
06/22/2009

These test results meet all the requirements of NELAC for accredited parameters.

The Lab Certification ID# is 100201.

All questions regarding this test report should be directed to the TestAmerica Project Manager whose signature appears on this report. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Chicago 2417 Bond Street, University Park, IL 60484  
Tel (708) 534-5200 Fax (708) 534-5211 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative**  
**500-J19494-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC/MS VOA**

Method(s) 5030B: Due to the high concentration of cis-1,2-Dicloroethene and Trichloroethene, the matrix spike / matrix spike duplicate (MS/MSD) for sample -8 was outside control limits. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>500-19494-3 IPC-GW-MW8</b>					
Trichloroethene		14	5.0	ug/L	8260B
<b>500-19494-4 IPC-GW-MW7</b>					
1,1-Dichloroethene		13	5.0	ug/L	8260B
cis-1,2-Dichloroethene		36	5.0	ug/L	8260B
1,1,1-Trichloroethane		15	5.0	ug/L	8260B
Trichloroethene		170	50	ug/L	8260B
Tetrachloroethene		19	5.0	ug/L	8260B
<b>500-19494-5 IPC-GW-MW6</b>					
Vinyl chloride		25	2.0	ug/L	8260B
1,1-Dichloroethene		22	5.0	ug/L	8260B
cis-1,2-Dichloroethene		210	50	ug/L	8260B
1,1,1-Trichloroethane		31	5.0	ug/L	8260B
Trichloroethene		73	5.0	ug/L	8260B
Tetrachloroethene		15	5.0	ug/L	8260B
<b>500-19494-6 IPC-GW-MW5</b>					
Vinyl chloride		8.8	2.0	ug/L	8260B
1,1-Dichloroethene		23	5.0	ug/L	8260B
1,1-Dichloroethane		6.0	5.0	ug/L	8260B
cis-1,2-Dichloroethene		180	50	ug/L	8260B
1,1,1-Trichloroethane		32	5.0	ug/L	8260B
Trichloroethene		180	50	ug/L	8260B
Tetrachloroethene		34	5.0	ug/L	8260B
<b>500-19494-7 IPC-GW-MW4</b>					
Vinyl chloride		74	2.0	ug/L	8260B
1,1-Dichloroethene		11	5.0	ug/L	8260B
1,1-Dichloroethane		27	5.0	ug/L	8260B
cis-1,2-Dichloroethene		180	50	ug/L	8260B
1,1,1-Trichloroethane		17	5.0	ug/L	8260B

## EXECUTIVE SUMMARY - Detections

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>500-19494-8</b> <b>IPC-GW-MW3</b>					
1,1-Dichloroethene		17	5.0	ug/L	8260B
1,1-Dichloroethane		11	5.0	ug/L	8260B
cis-1,2-Dichloroethene		74	5.0	ug/L	8260B
1,1,1-Trichloroethane		21	5.0	ug/L	8260B
Trichloroethene		170	50	ug/L	8260B
Tetrachloroethene		28	5.0	ug/L	8260B
<b>500-19494-9</b> <b>IPC-GW-MW2</b>					
1,1-Dichloroethene		13	5.0	ug/L	8260B
cis-1,2-Dichloroethene		37	5.0	ug/L	8260B
1,1,1-Trichloroethane		15	5.0	ug/L	8260B
Trichloroethene		150	50	ug/L	8260B
Tetrachloroethene		17	5.0	ug/L	8260B
<b>500-19494-10</b> <b>IPC-GW-MW1</b>					
Vinyl chloride		6.9	2.0	ug/L	8260B
1,1-Dichloroethene		9.5	5.0	ug/L	8260B
1,1-Dichloroethane		14	5.0	ug/L	8260B
cis-1,2-Dichloroethene		170	50	ug/L	8260B
Trichloroethene		20	5.0	ug/L	8260B

## METHOD SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS) Purge and Trap	TAL CHI TAL CHI	SW846 8260B SW846 5030B	

**Lab References:**

TAL CHI = TestAmerica Chicago

**Method References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## **METHOD / ANALYST SUMMARY**

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B	Drabek, Dave J	DJD

## SAMPLE SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
500-19494-1	IPC-F.B.	Water	06/15/2009 1540	06/16/2009 1030
500-19494-2	IPC-GW-MW9	Water	06/15/2009 1515	06/16/2009 1030
500-19494-3	IPC-GW-MW8	Water	06/15/2009 1456	06/16/2009 1030
500-19494-4	IPC-GW-MW7	Water	06/15/2009 1020	06/16/2009 1030
500-19494-5	IPC-GW-MW6	Water	06/15/2009 1048	06/16/2009 1030
500-19494-6	IPC-GW-MW5	Water	06/15/2009 1114	06/16/2009 1030
500-19494-7	IPC-GW-MW4	Water	06/15/2009 1144	06/16/2009 1030
500-19494-8	IPC-GW-MW3	Water	06/15/2009 1308	06/16/2009 1030
500-19494-8MS	IPC-GW-MW3	Water	06/15/2009 1308	06/16/2009 1030
500-19494-8MSD	IPC-GW-MW3	Water	06/15/2009 1308	06/16/2009 1030
500-19494-9	IPC-GW-MW2	Water	06/15/2009 1345	06/16/2009 1030
500-19494-10	IPC-GW-MW1	Water	06/15/2009 1414	06/16/2009 1030
500-19494-11	TRIP BLANK	Water	06/15/2009 1200	06/16/2009 1030

# **SAMPLE RESULTS**

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-19494-1

**Client Sample ID:** IPC-F.B.  
**Lab Sample ID:** 500-19494-1

Date Sampled: 06/15/2009 1540  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1337	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1337	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	108	%		72 - 135	
Toluene-d8 (Surr)	107	%		80 - 120	
4-Bromofluorobenzene (Surr)	96	%		77 - 120	

Ms. Mary Pearson  
Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Job Number: 500-19494-1

**Client Sample ID:** IPC-F.B.  
**Lab Sample ID:** 500-19494-1

Date Sampled: 06/15/2009 1540  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	93	%			Acceptance Limits 79 - 133

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW9  
**Lab Sample ID:** 500-19494-2

Date Sampled: 06/15/2009 1515  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1400	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1400	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	106	%		72 - 135	
Toluene-d8 (Surr)	105	%		80 - 120	
4-Bromofluorobenzene (Surr)	98	%		77 - 120	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW9  
**Lab Sample ID:** 500-19494-2

Date Sampled: 06/15/2009 1515  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	92	%			Acceptance Limits 79 - 133

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW8  
**Lab Sample ID:** 500-19494-3

Date Sampled: 06/15/2009 1456  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1424	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1424	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	14	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	110	%		72 - 135	
Toluene-d8 (Surr)	102	%		80 - 120	
4-Bromofluorobenzene (Surr)	94	%		77 - 120	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW8  
**Lab Sample ID:** 500-19494-3

Date Sampled: 06/15/2009 1456  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	96	%			Acceptance Limits 79 - 133

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW7  
**Lab Sample ID:** 500-19494-4

Date Sampled: 06/15/2009 1020  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1447	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1447	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	13	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	36	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	15	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	19	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107	%		72 - 135	
Toluene-d8 (Surr)	101	%		80 - 120	
4-Bromofluorobenzene (Surr)	95	%		77 - 120	
Dibromofluoromethane	90	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW7  
**Lab Sample ID:** 500-19494-4

Date Sampled: 06/15/2009 1020  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	06/18/2009 1510	
<b>Prep Method:</b> 5030B			Date Prepared:	06/18/2009 1510	
Trichloroethene	170	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	106	%		72 - 135	
Toluene-d8 (Surr)	103	%		80 - 120	
4-Bromofluorobenzene (Surr)	96	%		77 - 120	
Dibromofluoromethane	94	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW6  
**Lab Sample ID:** 500-19494-5

Date Sampled: 06/15/2009 1048  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1534	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1534	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	25	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	22	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	31	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	73	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	15	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104	%		72 - 135	
Toluene-d8 (Surr)	101	%		80 - 120	
4-Bromofluorobenzene (Surr)	96	%		77 - 120	
Dibromofluoromethane	92	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW6  
**Lab Sample ID:** 500-19494-5

Date Sampled: 06/15/2009 1048  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	06/18/2009 1557	
<b>Prep Method:</b> 5030B			Date Prepared:	06/18/2009 1557	
cis-1,2-Dichloroethene	210	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107	%		72 - 135	
Toluene-d8 (Surr)	104	%		80 - 120	
4-Bromofluorobenzene (Surr)	96	%		77 - 120	
Dibromofluoromethane	94	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW5  
**Lab Sample ID:** 500-19494-6

Date Sampled: 06/15/2009 1114  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1621	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1621	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	8.8	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	23	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	6.0	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	32	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	34	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107	%		72 - 135	
Toluene-d8 (Surr)	101	%		80 - 120	
4-Bromofluorobenzene (Surr)	96	%		77 - 120	
Dibromofluoromethane	94	%		79 - 133	

**Method: 8260B Run Type: DL**

Date Analyzed: 06/18/2009 1644

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW5  
**Lab Sample ID:** 500-19494-6

Date Sampled: 06/15/2009 1114  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1644	
cis-1,2-Dichloroethene	180	ug/L	2.1	50	10
Trichloroethene	180	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	112	%		72 - 135	
Toluene-d8 (Surr)	104	%		80 - 120	
4-Bromofluorobenzene (Surr)	97	%		77 - 120	
Dibromofluoromethane	96	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW4  
**Lab Sample ID:** 500-19494-7

Date Sampled: 06/15/2009 1144  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1708	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1708	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	74	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	11	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	27	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	17	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate					Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	%		72 - 135	
Toluene-d8 (Surr)	101	%		80 - 120	
4-Bromofluorobenzene (Surr)	99	%		77 - 120	
Dibromofluoromethane	94	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW4  
**Lab Sample ID:** 500-19494-7

Date Sampled: 06/15/2009 1144  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	06/18/2009 1731	
<b>Prep Method:</b> 5030B			Date Prepared:	06/18/2009 1731	
cis-1,2-Dichloroethene	180	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	111	%		72 - 135	
Toluene-d8 (Surr)	107	%		80 - 120	
4-Bromofluorobenzene (Surr)	98	%		77 - 120	
Dibromofluoromethane	94	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW3  
**Lab Sample ID:** 500-19494-8

Date Sampled: 06/15/2009 1308  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1755	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1755	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	17	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	11	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	74	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	21	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	28	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate					Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	%		72 - 135	
Toluene-d8 (Surr)	102	%		80 - 120	
4-Bromofluorobenzene (Surr)	91	%		77 - 120	
Dibromofluoromethane	96	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW3  
**Lab Sample ID:** 500-19494-8

Date Sampled: 06/15/2009 1308  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	06/18/2009 1818	
<b>Prep Method:</b> 5030B			Date Prepared:	06/18/2009 1818	
Trichloroethene	170	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	112	%		72 - 135	
Toluene-d8 (Surr)	107	%		80 - 120	
4-Bromofluorobenzene (Surr)	101	%		77 - 120	
Dibromofluoromethane	101	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW2  
**Lab Sample ID:** 500-19494-9

Date Sampled: 06/15/2009 1345  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 1927	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 1927	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	13	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	37	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	15	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	17	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	106	%		72 - 135	
Toluene-d8 (Surr)	100	%		80 - 120	
4-Bromofluorobenzene (Surr)	99	%		77 - 120	
Dibromofluoromethane	97	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW2  
**Lab Sample ID:** 500-19494-9

Date Sampled: 06/15/2009 1345  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	06/18/2009 1951	
<b>Prep Method:</b> 5030B			Date Prepared:	06/18/2009 1951	
Trichloroethene	150	ug/L	2.0	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	109	%		72 - 135	
Toluene-d8 (Surr)	108	%		80 - 120	
4-Bromofluorobenzene (Surr)	99	%		77 - 120	
Dibromofluoromethane	95	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW1  
**Lab Sample ID:** 500-19494-10

Date Sampled: 06/15/2009 1414  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 2014	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 2014	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	6.9	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	9.5	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	14	ug/L	0.18	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	20	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	105	%		72 - 135	
Toluene-d8 (Surr)	104	%		80 - 120	
4-Bromofluorobenzene (Surr)	98	%		77 - 120	
Dibromofluoromethane	94	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** IPC-GW-MW1  
**Lab Sample ID:** 500-19494-10

Date Sampled: 06/15/2009 1414  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method:</b> 8260B <b>Run Type:</b> DL			Date Analyzed:	06/18/2009 2038	
<b>Prep Method:</b> 5030B			Date Prepared:	06/18/2009 2038	
cis-1,2-Dichloroethene	170	ug/L	2.1	50	10
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107	%		72 - 135	
Toluene-d8 (Surr)	104	%		80 - 120	
4-Bromofluorobenzene (Surr)	100	%		77 - 120	
Dibromofluoromethane	99	%		79 - 133	

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Job Number: 500-19494-1

**Client Sample ID:** TRIP BLANK  
**Lab Sample ID:** 500-19494-11

Date Sampled: 06/15/2009 1200  
 Date Received: 06/16/2009 1030  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	06/18/2009 2101	
<b>Prep Method: 5030B</b>			Date Prepared:	06/18/2009 2101	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	109	%		72 - 135	
Toluene-d8 (Surr)	105	%		80 - 120	
4-Bromofluorobenzene (Surr)	93	%		77 - 120	

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Job Number: 500-19494-1

**Client Sample ID:** TRIP BLANK  
**Lab Sample ID:** 500-19494-11

Date Sampled: 06/15/2009 1200  
Date Received: 06/16/2009 1030  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	97	%			Acceptance Limits 79 - 133

## DATA REPORTING QUALIFIERS

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
GC/MS VOA	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	E	Result exceeded calibration range, secondary dilution required.

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:500-66173</b>					
LCS 500-66173/5	Lab Control Sample	T	Water	8260B	
MB 500-66173/4	Method Blank	T	Water	8260B	
500-19494-1	IPC-F.B.	T	Water	8260B	
500-19494-2	IPC-GW-MW9	T	Water	8260B	
500-19494-3	IPC-GW-MW8	T	Water	8260B	
500-19494-4	IPC-GW-MW7	T	Water	8260B	
500-19494-4DL	IPC-GW-MW7	T	Water	8260B	
500-19494-5	IPC-GW-MW6	T	Water	8260B	
500-19494-5DL	IPC-GW-MW6	T	Water	8260B	
500-19494-6	IPC-GW-MW5	T	Water	8260B	
500-19494-6DL	IPC-GW-MW5	T	Water	8260B	
500-19494-7	IPC-GW-MW4	T	Water	8260B	
500-19494-7DL	IPC-GW-MW4	T	Water	8260B	
500-19494-8	IPC-GW-MW3	T	Water	8260B	
500-19494-8DL	IPC-GW-MW3	T	Water	8260B	
500-19494-8MS	Matrix Spike	T	Water	8260B	
500-19494-8MSD	Matrix Spike Duplicate	T	Water	8260B	
500-19494-9	IPC-GW-MW2	T	Water	8260B	
500-19494-9DL	IPC-GW-MW2	T	Water	8260B	
500-19494-10	IPC-GW-MW1	T	Water	8260B	
500-19494-10DL	IPC-GW-MW1	T	Water	8260B	
500-19494-11	TRIP BLANK	T	Water	8260B	

#### Report Basis

T = Total

**Quality Control Results**

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

**Surrogate Recovery Report****8260B Volatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec	DBFM %Rec
500-19494-1	IPC-F.B.	108	107	96	93
500-19494-2	IPC-GW-MW9	106	105	98	92
500-19494-3	IPC-GW-MW8	110	102	94	96
500-19494-4	IPC-GW-MW7	107	101	95	90
500-19494-4 DL	IPC-GW-MW7 DL	106	103	96	94
500-19494-5	IPC-GW-MW6	104	101	96	92
500-19494-5 DL	IPC-GW-MW6 DL	107	104	96	94
500-19494-6	IPC-GW-MW5	107	101	96	94
500-19494-6 DL	IPC-GW-MW5 DL	112	104	97	96
500-19494-7	IPC-GW-MW4	107	101	99	94
500-19494-7 DL	IPC-GW-MW4 DL	111	107	98	94
500-19494-8	IPC-GW-MW3	107	102	91	96
500-19494-8 DL	IPC-GW-MW3 DL	112	107	101	101
500-19494-9	IPC-GW-MW2	106	100	99	97
500-19494-9 DL	IPC-GW-MW2 DL	109	108	99	95
500-19494-10	IPC-GW-MW1	105	104	98	94
500-19494-10 DL	IPC-GW-MW1 DL	107	104	100	99
500-19494-11	TRIP BLANK	109	105	93	97
MB 500-66173/4		108	107	98	92
LCS 500-66173/5		106	107	108	95
500-19494-8 MS	IPC-GW-MW3 MS	106	104	104	98
500-19494-8 MSD	IPC-GW-MW3 MSD	108	103	105	94

**Surrogate****Acceptance Limits**

12DCE = 1,2-Dichloroethane-d4 (Surr)	72-135
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	77-120
DBFM = Dibromofluoromethane	79-133

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

### **Method Blank - Batch: 500-66173**

Lab Sample ID: MB 500-66173/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 06/18/2009 1042  
 Date Prepared: 06/18/2009 1042

Analysis Batch: 500-66173  
 Prep Batch: N/A  
 Units: ug/L

**Method: 8260B**  
**Preparation: 5030B**

Instrument ID: Agilent 6890N GC - 5973N  
 Lab File ID: 2M0618.D  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	RL
Benzene	<5.0		0.16	5.0
Chloromethane	<5.0		0.33	5.0
Vinyl chloride	<2.0		0.23	2.0
Bromomethane	<5.0		0.44	5.0
Chloroethane	<5.0		0.45	5.0
1,1-Dichloroethene	<5.0		0.22	5.0
Carbon disulfide	<5.0		0.39	5.0
Acetone	<20		1.2	20
Methylene Chloride	<10		0.99	10
trans-1,2-Dichloroethene	<5.0		0.17	5.0
1,1-Dichloroethane	<5.0		0.18	5.0
cis-1,2-Dichloroethene	<5.0		0.21	5.0
Methyl Ethyl Ketone	<20		0.83	20
Chloroform	<5.0		0.13	5.0
1,1,1-Trichloroethane	<5.0		0.23	5.0
Carbon tetrachloride	<5.0		0.21	5.0
1,2-Dichloroethane	<5.0		0.22	5.0
Trichloroethene	<5.0		0.20	5.0
1,2-Dichloropropane	<5.0		0.23	5.0
Bromodichloromethane	<5.0		0.18	5.0
cis-1,3-Dichloropropene	<5.0		0.16	5.0
methyl isobutyl ketone	<20		0.58	20
Toluene	<5.0		0.16	5.0
trans-1,3-Dichloropropene	<5.0		0.13	5.0
1,1,2-Trichloroethane	<5.0		0.32	5.0
Tetrachloroethene	<5.0		0.14	5.0
2-Hexanone	<20		0.77	20
Dibromochloromethane	<5.0		0.19	5.0
Chlorobenzene	<5.0		0.17	5.0
Ethylbenzene	<5.0		0.17	5.0
Styrene	<5.0		0.15	5.0
Bromoform	<5.0		0.30	5.0
1,1,2,2-Tetrachloroethane	<5.0		0.25	5.0
Xylenes, Total	<5.0		0.33	5.0
<hr/>				
Surrogate	% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	108	72 - 135		
Toluene-d8 (Surr)	107	80 - 120		
4-Bromofluorobenzene (Surr)	98	77 - 120		
Dibromofluoromethane	92	79 - 133		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

### Lab Control Sample - Batch: 500-66173

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 500-66173/5  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 06/18/2009 1241  
 Date Prepared: 06/18/2009 1241

Analysis Batch: 500-66173  
 Prep Batch: N/A  
 Units: ug/L

Instrument ID: Agilent 6890N GC - 5973N  
 Lab File ID: 2S0618B.D  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	25.0	27.2	109	70 - 120	
Chloromethane	25.0	23.9	95	56 - 133	
Vinyl chloride	25.0	31.2	125	75 - 158	
Bromomethane	25.0	25.4	102	56 - 154	
Chloroethane	25.0	25.8	103	60 - 144	
1,1-Dichloroethene	25.0	25.0	100	55 - 129	
Carbon disulfide	25.0	20.5	82	31 - 146	
Acetone	25.0	28.6	115	29 - 152	
Methylene Chloride	25.0	24.6	98	63 - 128	
trans-1,2-Dichloroethene	25.0	26.9	108	66 - 120	
1,1-Dichloroethane	25.0	26.4	105	65 - 120	
cis-1,2-Dichloroethene	25.0	26.7	107	72 - 123	
Methyl Ethyl Ketone	25.0	29.5	118	47 - 138	
Chloroform	25.0	26.0	104	70 - 120	
1,1,1-Trichloroethane	25.0	27.4	109	64 - 122	
Carbon tetrachloride	25.0	29.6	119	62 - 122	
1,2-Dichloroethane	25.0	31.1	125	62 - 120	*
Trichloroethene	25.0	29.5	118	71 - 120	
1,2-Dichloropropane	25.0	29.7	119	75 - 120	
Bromodichloromethane	25.0	30.1	120	74 - 120	
cis-1,3-Dichloropropene	26.9	28.7	107	65 - 120	
methyl isobutyl ketone	25.0	28.5	114	59 - 120	
Toluene	25.0	29.3	117	72 - 120	
trans-1,3-Dichloropropene	24.3	27.3	112	59 - 120	
1,1,2-Trichloroethane	25.0	29.4	117	68 - 126	
Tetrachloroethene	25.0	29.7	119	70 - 120	
2-Hexanone	25.0	28.1	112	56 - 120	
Dibromochloromethane	25.0	29.3	117	64 - 120	
Chlorobenzene	25.0	28.2	113	75 - 120	
Ethylbenzene	25.0	27.3	109	76 - 120	
Styrene	25.0	27.9	111	76 - 120	
Bromoform	25.0	28.8	115	58 - 120	
1,1,2,2-Tetrachloroethane	25.0	26.7	107	69 - 120	
Xylenes, Total	75.0	88.4	118	74 - 120	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		106		72 - 135	
Toluene-d8 (Surr)		107		80 - 120	
4-Bromofluorobenzene (Surr)		108		77 - 120	
Dibromofluoromethane		95		79 - 133	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

### **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 500-66173**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID:	500-19494-8	Analysis Batch:	500-66173	Instrument ID:	Agilent 6890N GC - 5973I
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	9494-08S.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	06/18/2009 1841			Final Weight/Volume:	10 mL
Date Prepared:	06/18/2009 1841				
MSD Lab Sample ID:	500-19494-8	Analysis Batch:	500-66173	Instrument ID:	Agilent 6890N GC - 5973N
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	9494-08T.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	06/18/2009 1904			Final Weight/Volume:	10 mL
Date Prepared:	06/18/2009 1904				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	91	92	70 - 120	1	20		
Chloromethane	89	78	56 - 133	13	20		
Vinyl chloride	114	105	75 - 158	8	20		
Bromomethane	93	88	56 - 154	6	20		
Chloroethane	40	39	60 - 144	2	20	F	F
1,1-Dichloroethene	75	68	55 - 129	5	20		
Carbon disulfide	66	63	31 - 146	5	20		
Acetone	67	67	29 - 152	1	20		
Methylene Chloride	83	82	63 - 128	1	20		
trans-1,2-Dichloroethene	84	85	66 - 120	1	20		
1,1-Dichloroethane	82	76	65 - 120	5	20		
cis-1,2-Dichloroethene	55	39	72 - 123	5	20	F	F
Methyl Ethyl Ketone	85	73	47 - 138	15	20		
Chloroform	93	88	70 - 120	5	20		
1,1,1-Trichloroethane	79	68	64 - 122	7	20		
Carbon tetrachloride	95	96	62 - 122	1	20		
1,2-Dichloroethane	102	103	62 - 120	0	20		
Trichloroethene	23	5	71 - 120	3	20	E 4	E 4
1,2-Dichloropropane	100	100	75 - 120	0	20		
Bromodichloromethane	103	102	74 - 120	1	20		
cis-1,3-Dichloropropene	86	84	65 - 120	2	20		
methyl isobutyl ketone	84	81	59 - 120	4	20		
Toluene	96	97	72 - 120	2	20		
trans-1,3-Dichloropropene	90	87	59 - 120	3	20		
1,1,2-Trichloroethane	96	89	68 - 126	7	20		
Tetrachloroethene	84	81	70 - 120	2	20		
2-Hexanone	83	82	56 - 120	1	20		
Dibromochloromethane	96	96	64 - 120	0	20		
Chlorobenzene	95	92	75 - 120	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 500-66173

**Method: 8260B**  
**Preparation: 5030B**

MS Lab Sample ID: 500-19494-8      Analysis Batch: 500-66173  
Client Matrix: Water      Prep Batch: N/A  
Dilution: 1.0  
Date Analyzed: 06/18/2009 1841  
Date Prepared: 06/18/2009 1841

Instrument ID: Agilent 6890N GC - 5973I  
Lab File ID: 9494-08S.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 500-19494-8      Analysis Batch: 500-66173  
Client Matrix: Water      Prep Batch: N/A  
Dilution: 1.0  
Date Analyzed: 06/18/2009 1904  
Date Prepared: 06/18/2009 1904

Instrument ID: Agilent 6890N GC - 5973N  
Lab File ID: 9494-08T.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ethylbenzene	90	90	76 - 120	1	20		
Styrene	94	93	76 - 120	1	20		
Bromoform	96	93	58 - 120	3	20		
1,1,2,2-Tetrachloroethane	85	88	69 - 120	3	20		
Xylenes, Total	98	97	74 - 120	2	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	106		108		72 - 135		
Toluene-d8 (Surr)	104		103		80 - 120		
4-Bromofluorobenzene (Surr)	104		105		77 - 120		
Dibromofluoromethane	98		94		79 - 133		

Calculations are performed before rounding to avoid round-off errors in calculated results.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Broad Street, University Park, IL 60436  
Phone: 708-534-5200 Fax: 708-534-5211

Fax:

E-Mail:

Chain of Custody Number:

Lab Job #: 500-19494  
06/22/2000

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: 31

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Comments: \_\_\_\_\_

Preservative Key

Report To	Mary Pearson	Bill To	
Contact:	ETL	Contact:	
Company:		Company:	
Address:		Address:	
Address:		Address:	
Phone:	606-365-6276	Phone:	
Fax:		Fax:	
E-Mail:		PQ# Reference:	
Temperature °C of Cooler:	31		

Client ETL Client Project #

Project Name IPC

Project Location/State Rockford IL

Sample Brian McQueen

Lab P#: Lab P#:

Preservative

Parameter

Sample ID

Sampling Date

Time

# of Containers

Matrix

Comments

Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Comments
1		FB, IPC-FB	6-15-01	1546	3	W	VOC
2		AWG, IPC-GW-MW		1515			
3		IPC-GW-MW		1456			
4		IPC-GW-MW		1020			
5		IPC-GW-MW		1048			
6		IPC-GW-MW		1114			
7		IPC-GW-MW		1144			
8	X	IPC-GW-MW		1308	9		
9		IPC-GW-MW		1345	3		
10		IPC-GW-MW		1414	3		

Turnaround Time Required (Business Days):

— 1 Day — 2 Days — 5 Days — 10 days — 15 Days — Other

Sample Disposal  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months  A fee may be assessed if samples are retained longer than 1 month

RECEIVED 3/11/01  
By: Brian McQueen  
Company: ETL  
Date: 6-15-01  
Time: 1730  
Received By: JKL  
Company: ETL  
Date: 6-16-01  
Time: 1030  
Lab Counter:

Shipped  
JKL

Hand Delivered

Client Comments: \_\_\_\_\_

Matrix Key  
WW - Wastewater  
W - Water  
S - Soil  
L - Leachate  
W - Waste  
MS - Miscellaneous  
O - Oil  
A - Air

#11 - Temp Blank - added by TA

WW - Wastewater  
W - Water  
S - Soil  
L - Sludge  
W - Waste  
MS - Miscellaneous  
O - Oil  
A - Air

## Login Sample Receipt Check List

Client: Environmental Information Logistics (EIL)

Job Number: 500-19494-1

**Login Number: 19494**

**List Source: TestAmerica Chicago**

**Creator: Lunt, Jeff T**

**List Number: 1**

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

## ANALYTICAL REPORT

Job Number: 500-17657-1

Job Description: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Attention: Ms. Mary Pearson



Approved for release.  
Richard C Wright  
Project Manager II  
3/30/2009 2:39 PM

Richard C Wright  
Project Manager II  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)  
03/30/2009

These test results meet all the requirements of NELAC for accredited parameters.

The Lab Certification ID# is 100201.

All questions regarding this test report should be directed to the TestAmerica Project Manager whose signature appears on this report. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Chicago 2417 Bond Street, University Park, IL 60466

Tel (708) 534-5200 Fax (708) 534-5211 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative**  
**500-J17657-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC/MS VOA**

No analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

Lab Sample ID Analyte	Client Sample ID MW7	Result / Qualifier	Reporting Limit	Units	Method
cis-1,2-Dichloroethene		13	5.0	ug/L	8260B
Trichloroethene		31	5.0	ug/L	8260B
500-17657-2	MW8				
cis-1,2-Dichloroethene		11	5.0	ug/L	8260B
Trichloroethene		27	5.0	ug/L	8260B

## METHOD SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS) Purge and Trap	TAL CHI TAL CHI	SW846 8260B SW846 5030B	

**Lab References:**

TAL CHI = TestAmerica Chicago

**Method References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

Method	Analyst	Analyst ID
SW846 8260B	Alikpala, Elaine	EA

## SAMPLE SUMMARY

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
500-17657-1	MW7	Water	03/16/2009 1030	03/17/2009 1020
500-17657-2	MW8	Water	03/16/2009 1045	03/17/2009 1020
500-17657-3	MW9	Water	03/16/2009 1204	03/17/2009 1020
500-17657-3MS	MW9	Water	03/16/2009 1204	03/17/2009 1020
500-17657-3MSD	MW9	Water	03/16/2009 1204	03/17/2009 1020
500-17657-4	FIELD BLANK	Water	03/16/2009 1600	03/17/2009 1020
500-17657-5	TRIP BLANK	Water	03/16/2009 0000	03/17/2009 1020

# **SAMPLE RESULTS**

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-17657-1

**Client Sample ID:** MW7  
**Lab Sample ID:** 500-17657-1

Date Sampled: 03/16/2009 1030  
 Date Received: 03/17/2009 1020  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	03/25/2009 2047	
<b>Prep Method: 5030B</b>			Date Prepared:	03/25/2009 2047	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	13	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	31	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107	%		70 - 125	
Toluene-d8 (Surr)	101	%		75 - 120	
4-Bromofluorobenzene (Surr)	97	%		75 - 120	

Ms. Mary Pearson  
Environmental Information Logistics (EIL)  
975 Burton Street  
Unit 10  
Beloit, WI 53511

Job Number: 500-17657-1

**Client Sample ID:** MW7  
**Lab Sample ID:** 500-17657-1

Date Sampled: 03/16/2009 1030  
Date Received: 03/17/2009 1020  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	98	%			Acceptance Limits 75 - 120

Ms. Mary Pearson  
 Environmental Information Logistics (EIL)  
 975 Burton Street  
 Unit 10  
 Beloit, WI 53511

Job Number: 500-17657-1

**Client Sample ID:** MW8  
**Lab Sample ID:** 500-17657-2

Date Sampled: 03/16/2009 1045  
 Date Received: 03/17/2009 1020  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	03/25/2009 2109	
<b>Prep Method: 5030B</b>			Date Prepared:	03/25/2009 2109	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	11	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	27	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	111	%		70 - 125	
Toluene-d8 (Surr)	101	%		75 - 120	
4-Bromofluorobenzene (Surr)	95	%		75 - 120	

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Job Number: 500-17657-1

**Client Sample ID:** MW8  
**Lab Sample ID:** 500-17657-2

Date Sampled: 03/16/2009 1045  
Date Received: 03/17/2009 1020  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	104	%		75 - 120	Acceptance Limits

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Job Number: 500-17657-1

**Client Sample ID:** MW9  
**Lab Sample ID:** 500-17657-3

Date Sampled: 03/16/2009 1204  
 Date Received: 03/17/2009 1020  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	03/26/2009 1639	
<b>Prep Method: 5030B</b>			Date Prepared:	03/26/2009 1639	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	122	%		70 - 125	
Toluene-d8 (Surr)	100	%		75 - 120	
4-Bromofluorobenzene (Surr)	93	%		75 - 120	

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Job Number: 500-17657-1

**Client Sample ID:** MW9  
**Lab Sample ID:** 500-17657-3

Date Sampled: 03/16/2009 1204  
Date Received: 03/17/2009 1020  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	108	%		75 - 120	Acceptance Limits

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Job Number: 500-17657-1

**Client Sample ID: FIELD BLANK**  
**Lab Sample ID: 500-17657-4**

Date Sampled: 03/16/2009 1600  
 Date Received: 03/17/2009 1020  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	03/25/2009 2131	
<b>Prep Method: 5030B</b>			Date Prepared:	03/25/2009 2131	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	109	%		70 - 125	
Toluene-d8 (Surr)	100	%		75 - 120	
4-Bromofluorobenzene (Surr)	95	%		75 - 120	

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Job Number: 500-17657-1

**Client Sample ID:** FIELD BLANK  
**Lab Sample ID:** 500-17657-4

Date Sampled: 03/16/2009 1600  
Date Received: 03/17/2009 1020  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	103	%		75 - 120	Acceptance Limits

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Job Number: 500-17657-1

**Client Sample ID: TRIP BLANK**  
**Lab Sample ID: 500-17657-5**

Date Sampled: 03/16/2009 0000  
 Date Received: 03/17/2009 1020  
 Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
<b>Method: 8260B</b>			Date Analyzed:	03/26/2009 1701	
<b>Prep Method: 5030B</b>			Date Prepared:	03/26/2009 1701	
Benzene	<5.0	ug/L	0.16	5.0	1.0
Chloromethane	<5.0	ug/L	0.33	5.0	1.0
Vinyl chloride	<2.0	ug/L	0.23	2.0	1.0
Bromomethane	<5.0	ug/L	0.44	5.0	1.0
Chloroethane	<5.0	ug/L	0.45	5.0	1.0
1,1-Dichloroethene	<5.0	ug/L	0.22	5.0	1.0
Carbon disulfide	<5.0	ug/L	0.39	5.0	1.0
Acetone	<20	ug/L	1.2	20	1.0
Methylene Chloride	<10	ug/L	0.99	10	1.0
trans-1,2-Dichloroethene	<5.0	ug/L	0.17	5.0	1.0
1,1-Dichloroethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,2-Dichloroethene	<5.0	ug/L	0.21	5.0	1.0
Methyl Ethyl Ketone	<20	ug/L	0.83	20	1.0
Chloroform	<5.0	ug/L	0.13	5.0	1.0
1,1,1-Trichloroethane	<5.0	ug/L	0.23	5.0	1.0
Carbon tetrachloride	<5.0	ug/L	0.21	5.0	1.0
1,2-Dichloroethane	<5.0	ug/L	0.22	5.0	1.0
Trichloroethene	<5.0	ug/L	0.20	5.0	1.0
1,2-Dichloropropane	<5.0	ug/L	0.23	5.0	1.0
Bromodichloromethane	<5.0	ug/L	0.18	5.0	1.0
cis-1,3-Dichloropropene	<5.0	ug/L	0.16	5.0	1.0
methyl isobutyl ketone	<20	ug/L	0.58	20	1.0
Toluene	<5.0	ug/L	0.16	5.0	1.0
trans-1,3-Dichloropropene	<5.0	ug/L	0.13	5.0	1.0
1,1,2-Trichloroethane	<5.0	ug/L	0.32	5.0	1.0
Tetrachloroethene	<5.0	ug/L	0.14	5.0	1.0
2-Hexanone	<20	ug/L	0.77	20	1.0
Dibromochloromethane	<5.0	ug/L	0.19	5.0	1.0
Chlorobenzene	<5.0	ug/L	0.17	5.0	1.0
Ethylbenzene	<5.0	ug/L	0.17	5.0	1.0
Styrene	<5.0	ug/L	0.15	5.0	1.0
Bromoform	<5.0	ug/L	0.30	5.0	1.0
1,1,2,2-Tetrachloroethane	<5.0	ug/L	0.25	5.0	1.0
Xylenes, Total	<5.0	ug/L	0.33	5.0	1.0
Surrogate				Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	119	%		70 - 125	
Toluene-d8 (Surr)	99	%		75 - 120	
4-Bromofluorobenzene (Surr)	93	%		75 - 120	

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Job Number: 500-17657-1

**Client Sample ID:** TRIP BLANK  
**Lab Sample ID:** 500-17657-5

Date Sampled: 03/16/2009 0000  
Date Received: 03/17/2009 1020  
Client Matrix: Water

Analyte	Result/Qualifier	Unit	MDL	RL	Dilution
Surrogate Dibromofluoromethane	107	%		75 - 120	Acceptance Limits

## DATA REPORTING QUALIFIERS

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
GC/MS VOA	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:500-60383</b>					
LCS 500-60383/29	Lab Control Spike	T	Water	8260B	
LCSD 500-60383/30	Lab Control Spike Duplicate	T	Water	8260B	
MB 500-60383/28	Method Blank	T	Water	8260B	
500-17657-1	MW7	T	Water	8260B	
500-17657-2	MW8	T	Water	8260B	
500-17657-4	FIELD BLANK	T	Water	8260B	
<b>Analysis Batch:500-60423</b>					
LCS 500-60423/6	Lab Control Spike	T	Water	8260B	
LCSD 500-60423/31	Lab Control Spike Duplicate	T	Water	8260B	
MB 500-60423/5	Method Blank	T	Water	8260B	
500-17657-3	MW9	T	Water	8260B	
500-17657-3MS	Matrix Spike	T	Water	8260B	
500-17657-3MSD	Matrix Spike Duplicate	T	Water	8260B	
500-17657-5	TRIP BLANK	T	Water	8260B	

#### Report Basis

T = Total

**Surrogate Recovery Report****8260B Volatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	12DCE %Rec	TOL %Rec	BFB %Rec	DBFM %Rec
500-17657-1	MW7	107	101	97	98
500-17657-2	MW8	111	101	95	104
500-17657-3	MW9	122	100	93	108
500-17657-4	FIELD BLANK	109	100	95	103
500-17657-5	TRIP BLANK	119	99	93	107
MB 500-60383/28		105	100	97	99
MB 500-60423/5		116	100	94	106
LCS 500-60383/29		100	100	100	98
LCS 500-60423/6		113	102	100	103
LCSD 500-60383/30		105	102	97	101
LCSD 500-60423/31		124	103	99	106
500-17657-3 MS	MW9 MS	122	102	99	106
500-17657-3 MSD	MW9 MSD	122	103	98	108

**Surrogate****Acceptance Limits**

12DCE = 1,2-Dichloroethane-d4 (Surr)	70-125
TOL = Toluene-d8 (Surr)	75-120
BFB = 4-Bromofluorobenzene (Surr)	75-120
DBFM = Dibromofluoromethane	75-120

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### **Method Blank - Batch: 500-60383**

Lab Sample ID: MB 500-60383/28  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 03/25/2009 1320  
 Date Prepared: 03/25/2009 1320

Analysis Batch: 500-60383  
 Prep Batch: N/A  
 Units: ug/L

**Method: 8260B**  
**Preparation: 5030B**

Instrument ID: Agilent 6890A GC - 5973 N  
 Lab File ID: 22M0325.D  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	RL
Benzene	<5.0		0.16	5.0
Chloromethane	<5.0		0.33	5.0
Vinyl chloride	<2.0		0.23	2.0
Bromomethane	<5.0		0.44	5.0
Chloroethane	<5.0		0.45	5.0
1,1-Dichloroethene	<5.0		0.22	5.0
Carbon disulfide	<5.0		0.39	5.0
Acetone	<20		1.2	20
Methylene Chloride	<10		0.99	10
trans-1,2-Dichloroethene	<5.0		0.17	5.0
1,1-Dichloroethane	<5.0		0.18	5.0
cis-1,2-Dichloroethene	<5.0		0.21	5.0
Methyl Ethyl Ketone	<20		0.83	20
Chloroform	<5.0		0.13	5.0
1,1,1-Trichloroethane	<5.0		0.23	5.0
Carbon tetrachloride	<5.0		0.21	5.0
1,2-Dichloroethane	<5.0		0.22	5.0
Trichloroethene	<5.0		0.20	5.0
1,2-Dichloropropane	<5.0		0.23	5.0
Bromodichloromethane	<5.0		0.18	5.0
cis-1,3-Dichloropropene	<5.0		0.16	5.0
methyl isobutyl ketone	<20		0.58	20
Toluene	<5.0		0.16	5.0
trans-1,3-Dichloropropene	<5.0		0.13	5.0
1,1,2-Trichloroethane	<5.0		0.32	5.0
Tetrachloroethene	<5.0		0.14	5.0
2-Hexanone	<20		0.77	20
Dibromochloromethane	<5.0		0.19	5.0
Chlorobenzene	<5.0		0.17	5.0
Ethylbenzene	<5.0		0.17	5.0
Styrene	<5.0		0.15	5.0
Bromoform	<5.0		0.30	5.0
1,1,2,2-Tetrachloroethane	<5.0		0.25	5.0
Xylenes, Total	<5.0		0.33	5.0
<hr/>				
Surrogate	% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	105	70 - 125		
Toluene-d8 (Surr)	100	75 - 120		
4-Bromofluorobenzene (Surr)	97	75 - 120		
Dibromofluoromethane	99	75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 500-60383**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 500-60383/29	Analysis Batch: 500-60383	Instrument ID: Agilent 6890A GC - 5973 N
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 22S0325.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 03/25/2009 1342		Final Weight/Volume: 10 mL
Date Prepared: 03/25/2009 1342		

LCSD Lab Sample ID: LCSD 500-60383/30	Analysis Batch: 500-60383	Instrument ID: Agilent 6890A GC - 5973
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 22T0325.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 03/25/2009 2323		Final Weight/Volume: 10 mL
Date Prepared: 03/25/2009 2323		

Analyte	% Rec.						LCS Qual	LCSD Qual
	LCS	LCSD	Limit	RPD	RPD Limit			
Benzene	114	111	74 - 120	3	20			
Chloromethane	114	116	38 - 148	2	20			
Vinyl chloride	122	125	49 - 140	2	20			
Bromomethane	124	131	56 - 157	5	20			
Chloroethane	115	124	56 - 140	8	20			
1,1-Dichloroethene	109	109	55 - 121	0	20			
Carbon disulfide	114	115	38 - 135	0	20			
Acetone	77	77	10 - 175	1	20			
Methylene Chloride	108	91	65 - 126	18	20			
trans-1,2-Dichloroethene	103	101	69 - 120	2	20			
1,1-Dichloroethane	103	101	69 - 120	2	20			
cis-1,2-Dichloroethene	107	104	76 - 124	3	20			
Methyl Ethyl Ketone	86	89	28 - 160	3	20			
Chloroform	103	102	70 - 120	0	20			
1,1,1-Trichloroethane	104	103	68 - 125	1	20			
Carbon tetrachloride	107	103	61 - 128	4	20			
1,2-Dichloroethane	109	109	71 - 120	1	20			
Trichloroethene	118	116	69 - 120	2	20			
1,2-Dichloropropane	107	102	75 - 120	5	20			
Bromodichloromethane	108	106	79 - 134	2	20			
cis-1,3-Dichloropropene	99	92	64 - 120	7	20			
methyl isobutyl ketone	94	89	38 - 172	5	20			
Toluene	116	112	78 - 120	3	20			
trans-1,3-Dichloropropene	99	93	65 - 120	6	20			
1,1,2-Trichloroethane	105	101	74 - 123	4	20			
Tetrachloroethene	102	97	65 - 120	5	20			
2-Hexanone	87	81	39 - 158	8	20			
Dibromochloromethane	92	85	78 - 126	8	20			
Chlorobenzene	100	95	78 - 120	5	20			
Ethylbenzene	114	107	79 - 120	7	20			
Styrene	95	89	80 - 121	6	20			
Bromoform	88	82	58 - 122	7	20			

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### Lab Control Spike/

### Lab Control Spike Duplicate Recovery Report - Batch: 500-60383

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID: LCS 500-60383/29  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 03/25/2009 1342  
Date Prepared: 03/25/2009 1342

Analysis Batch: 500-60383  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890A GC - 5973 N  
Lab File ID: 22S0325.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 500-60383/30  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 03/25/2009 2323  
Date Prepared: 03/25/2009 2323

Analysis Batch: 500-60383  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890A GC - 5973  
Lab File ID: 22T0325.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,1,2,2-Tetrachloroethane	98	91	71 - 120	7	20		
Xylenes, Total	115	108	78 - 120	6	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	100		105		70 - 125		
Toluene-d8 (Surr)	100		102		75 - 120		
4-Bromofluorobenzene (Surr)	100		97		75 - 120		
Dibromofluoromethane	98		101		75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### **Method Blank - Batch: 500-60423**

Lab Sample ID: MB 500-60423/5  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 03/26/2009 1444  
 Date Prepared: 03/26/2009 1444

Analysis Batch: 500-60423  
 Prep Batch: N/A  
 Units: ug/L

### **Method: 8260B Preparation: 5030B**

Instrument ID: Agilent 6890A GC - 5973 N  
 Lab File ID: 22M0326.D  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	RL
Benzene	<5.0		0.16	5.0
Chloromethane	<5.0		0.33	5.0
Vinyl chloride	<2.0		0.23	2.0
Bromomethane	<5.0		0.44	5.0
Chloroethane	<5.0		0.45	5.0
1,1-Dichloroethene	<5.0		0.22	5.0
Carbon disulfide	<5.0		0.39	5.0
Acetone	<20		1.2	20
Methylene Chloride	<10		0.99	10
trans-1,2-Dichloroethene	<5.0		0.17	5.0
1,1-Dichloroethane	<5.0		0.18	5.0
cis-1,2-Dichloroethene	<5.0		0.21	5.0
Methyl Ethyl Ketone	<20		0.83	20
Chloroform	<5.0		0.13	5.0
1,1,1-Trichloroethane	<5.0		0.23	5.0
Carbon tetrachloride	<5.0		0.21	5.0
1,2-Dichloroethane	<5.0		0.22	5.0
Trichloroethene	<5.0		0.20	5.0
1,2-Dichloropropane	<5.0		0.23	5.0
Bromodichloromethane	<5.0		0.18	5.0
cis-1,3-Dichloropropene	<5.0		0.16	5.0
methyl isobutyl ketone	<20		0.58	20
Toluene	<5.0		0.16	5.0
trans-1,3-Dichloropropene	<5.0		0.13	5.0
1,1,2-Trichloroethane	<5.0		0.32	5.0
Tetrachloroethene	<5.0		0.14	5.0
2-Hexanone	<20		0.77	20
Dibromochloromethane	<5.0		0.19	5.0
Chlorobenzene	<5.0		0.17	5.0
Ethylbenzene	<5.0		0.17	5.0
Styrene	<5.0		0.15	5.0
Bromoform	<5.0		0.30	5.0
1,1,2,2-Tetrachloroethane	<5.0		0.25	5.0
Xylenes, Total	<5.0		0.33	5.0
<hr/>				
Surrogate	% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	116	70 - 125		
Toluene-d8 (Surr)	100	75 - 120		
4-Bromofluorobenzene (Surr)	94	75 - 120		
Dibromofluoromethane	106	75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 500-60423**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 500-60423/6	Analysis Batch: 500-60423	Instrument ID: Agilent 6890A GC - 5973 N
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 22S0326A.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 03/26/2009 1616		Final Weight/Volume: 10 mL
Date Prepared: 03/26/2009 1616		

LCSD Lab Sample ID: LCSD 500-60423/31	Analysis Batch: 500-60423	Instrument ID: Agilent 6890A GC - 5973
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 22T0326.D
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 10 mL
Date Analyzed: 03/27/2009 0113		Final Weight/Volume: 10 mL
Date Prepared: 03/27/2009 0113		

Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	103	99	74 - 120	4	20		
Chloromethane	115	108	38 - 148	6	20		
Vinyl chloride	121	115	49 - 140	5	20		
Bromomethane	143	140	56 - 157	2	20		
Chloroethane	101	99	56 - 140	2	20		
1,1-Dichloroethene	108	102	55 - 121	5	20		
Carbon disulfide	114	111	38 - 135	2	20		
Acetone	102	93	10 - 175	9	20		
Methylene Chloride	98	110	65 - 126	12	20		
trans-1,2-Dichloroethene	102	97	69 - 120	4	20		
1,1-Dichloroethane	102	101	69 - 120	2	20		
cis-1,2-Dichloroethene	104	100	76 - 124	4	20		
Methyl Ethyl Ketone	97	91	28 - 160	6	20		
Chloroform	108	105	70 - 120	3	20		
1,1,1-Trichloroethane	109	107	68 - 125	1	20		
Carbon tetrachloride	117	116	61 - 128	1	20		
1,2-Dichloroethane	121	123	71 - 120	2	20	*	*
Trichloroethene	107	105	69 - 120	2	20		
1,2-Dichloropropane	106	102	75 - 120	4	20		
Bromodichloromethane	115	113	79 - 134	2	20		
cis-1,3-Dichloropropene	95	94	64 - 120	1	20		
methyl isobutyl ketone	97	91	38 - 172	6	20		
Toluene	103	98	78 - 120	4	20		
trans-1,3-Dichloropropene	96	95	65 - 120	1	20		
1,1,2-Trichloroethane	105	106	74 - 123	1	20		
Tetrachloroethene	98	95	65 - 120	3	20		
2-Hexanone	83	84	39 - 158	2	20		
Dibromochloromethane	92	92	78 - 126	0	20		
Chlorobenzene	98	92	78 - 120	6	20		
Ethylbenzene	100	94	79 - 120	6	20		
Styrene	94	88	80 - 121	7	20		
Bromoform	85	90	58 - 122	6	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### Lab Control Spike/

### Lab Control Spike Duplicate Recovery Report - Batch: 500-60423

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID: LCS 500-60423/6  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 03/26/2009 1616  
Date Prepared: 03/26/2009 1616

Analysis Batch: 500-60423  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890A GC - 5973 N  
Lab File ID: 22S0326A.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 500-60423/31  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 03/27/2009 0113  
Date Prepared: 03/27/2009 0113

Analysis Batch: 500-60423  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Agilent 6890A GC - 5973  
Lab File ID: 22T0326.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,1,2,2-Tetrachloroethane	94	99	71 - 120	6	20		
Xylenes, Total	103	97	78 - 120	5	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	113		124		70 - 125		
Toluene-d8 (Surr)	102		103		75 - 120		
4-Bromofluorobenzene (Surr)	100		99		75 - 120		
Dibromofluoromethane	103		106		75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 500-60423

**Method: 8260B**  
**Preparation: 5030B**

MS Lab Sample ID:	500-17657-3	Analysis Batch:	500-60423	Instrument ID:	Agilent 6890A GC - 5973
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	17657-03S.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/27/2009 0006			Final Weight/Volume:	10 mL
Date Prepared:	03/27/2009 0006				
MSD Lab Sample ID:	500-17657-3	Analysis Batch:	500-60423	Instrument ID:	Agilent 6890A GC - 5973 N
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	17657-03T.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/27/2009 0028			Final Weight/Volume:	10 mL
Date Prepared:	03/27/2009 0028				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	100	99	74 - 120	1	20		
Chloromethane	105	111	38 - 148	6	20		
Vinyl chloride	112	118	49 - 140	6	20		
Bromomethane	144	145	56 - 157	1	20		
Chloroethane	97	98	56 - 140	1	20		
1,1-Dichloroethene	102	103	55 - 121	1	20		
Carbon disulfide	107	109	38 - 135	2	20		
Acetone	85	87	10 - 175	2	20		
Methylene Chloride	112	112	65 - 126	0	20		
trans-1,2-Dichloroethene	97	98	69 - 120	0	20		
1,1-Dichloroethane	103	102	69 - 120	1	20		
cis-1,2-Dichloroethene	104	104	76 - 124	0	20		
Methyl Ethyl Ketone	87	87	28 - 160	1	20		
Chloroform	109	108	70 - 120	1	20		
1,1,1-Trichloroethane	112	109	68 - 125	3	20		
Carbon tetrachloride	117	116	61 - 128	1	20		
1,2-Dichloroethane	124	123	71 - 120	1	20	F	F
Trichloroethene	104	104	69 - 120	1	20		
1,2-Dichloropropane	103	103	75 - 120	0	20		
Bromodichloromethane	115	114	79 - 134	1	20		
cis-1,3-Dichloropropene	90	90	64 - 120	0	20		
methyl isobutyl ketone	93	92	38 - 172	1	20		
Toluene	100	99	78 - 120	0	20		
trans-1,3-Dichloropropene	95	94	65 - 120	2	20		
1,1,2-Trichloroethane	104	103	74 - 123	1	20		
Tetrachloroethene	97	94	65 - 120	3	20		
2-Hexanone	83	82	39 - 158	1	20		
Dibromochloromethane	92	91	78 - 126	1	20		
Chlorobenzene	95	94	78 - 120	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 500-60423

Method: 8260B  
Preparation: 5030B

MS Lab Sample ID:	500-17657-3	Analysis Batch:	500-60423	Instrument ID:	Agilent 6890A GC - 5973
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	17657-03S.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/27/2009 0006			Final Weight/Volume:	10 mL
Date Prepared:	03/27/2009 0006				
MSD Lab Sample ID:	500-17657-3	Analysis Batch:	500-60423	Instrument ID:	Agilent 6890A GC - 5973 N
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	17657-03T.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/27/2009 0028			Final Weight/Volume:	10 mL
Date Prepared:	03/27/2009 0028				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ethylbenzene	96	95	79 - 120	1	20		
Styrene	91	90	80 - 121	0	20		
Bromoform	88	87	58 - 122	1	20		
1,1,2,2-Tetrachloroethane	95	95	71 - 120	1	20		
Xylenes, Total	100	100	78 - 120	0	20		
Surrogate		MS % Rec		MSD % Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		122		122		70 - 125	
Toluene-d8 (Surr)		102		103		75 - 120	
4-Bromofluorobenzene (Surr)		99		98		75 - 120	
Dibromofluoromethane		106		108		75 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60466  
Phone: 708.534.5200 Fax: 708.534.5211

Project Name: **TPC**

Project Location/State: **Rockford Illinois**

Sample ID: **Brian McLean**

Lab Project #: **Lab PH**

Client: **IPC/ETL**

Client Project #: **34**

Preservative:

Parameter:

Date:

Time:

# of Containers:

Matrix:

Sampling:

Date:

Time:

# of Containers:

Matrix:

Sampling:

Date:

Time:

# of Containers:

Matrix:

Sampling:

Date:

Time:

		Sample Disposal		Preservative Key	
		<input type="checkbox"/> Return to Client	<input type="checkbox"/> Disposal by Lab	<input type="checkbox"/> Archive for	Months
1	MW7	3/6/01	1030	1. HCl, Cool to 4°	
2	MW8	3/6/01	1045	2. H2SO4, Cool to 4°	
3	X MW9	3/6/01	1204	3. HNO3, Cool to 4°	
4	field Blank	4/6/01		4. NaOH, Cool to 4°	
5	trip Blank			5. NaOCl, Cool to 4°	
				6. Cool to 4°	
				7. None	
				8. Other	

Bill To:	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
E-Mail:	
PO# Reference ref:	
Temperature °C of Cooler:	<b>34</b>

Lab Job #:	<b>500-1765</b>
Chain of Custody Number:	
Page	<b>30</b> of <b>30</b>
Page:	
Fax:	

## Chain of Custody Record

Turnaround Time Required (Business Days)

— Day    — 2 Days    — 5 Days    — 10 Days    — 15 Days    — Other

Sample Disposal  
 Return to Client     Disposal by Lab     Archive for \_\_\_\_\_ Months

(A fee may be assessed if samples are retained longer than 1 month)

Sampled By: **Cohen**      Date: **3-16-01**      Time: **1700**      Received By: **JF**      Company: **TPC**      Date: **3-17-01**      Time: **1120**

Released By: **JF**      Company: **TPC**      Date: **3-17-01**      Time: **1120**

Lab Counter:

Shipped: **JK**

Hand Delivered:

Matrix Key

SE - Sediment

WW - Washwater

W - Water

SC - Soil

S - Soil

SL - Surface

L - Leechate

WH - Wipe

MS - Miscellaneous

DL - Oil

OL - Oil

A - Air

A - Air

## Login Sample Receipt Check List

Client: Environmental Information Logistics (EIL)

Job Number: 500-17657-1

**Login Number: 17657**

**List Source: TestAmerica Chicago**

**Creator: Lunt, Jeff T**

**List Number: 1**

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.4
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

December 2008 Through June 2009  
 Data Summary  
 IPC/Roto-Rooter Site

Well	Location	Parameter	Previous Interwell Upper Limit (95%)	Recalculated Interwell Upper Limit (95%)	Previous Intrawell Upper Limit (99%)	Re-Calculated Intrawell Upper Limit (99%)	Dec-08		Mar-09		Jun-09		Exceedance of Previous Limit?	Exceedance of Recalculated Limit?
							Result	Qualifier	Result	Qualifier	Result	Qualifier		
MW1	Downgradient	1,1,1-Trichloroethane	52.5	NA	25.1	NA	9.4		NA		5	U	No	NA
MW1	Downgradient	1,1-Dichloroethane	14	14	24	NA	13		NA		14		No	No
MW1	Downgradient	1,1-Dichloroethene	32.9	NA	21.1	NA	14		NA		9.5		No	NA
MW1	Downgradient	cis-1,2-Dichloroethene	250	NA	295	NA	230		NA		170		No	NA
MW1	Downgradient	Tetrachloroethene	40	45.8	5.6	NA	5	U	NA		5	U	No	No
MW1	Downgradient	Trichloroethene	310	340	324	NA	45		NA		20		No	No
MW1	Downgradient	Vinyl Chloride	48	NA	10.4	NA	7.3		NA		6.9		No	NA
MW2	Downgradient	1,1,1-Trichloroethane	52.5	NA	39.3	NA	21		NA		15		No	NA
MW2	Downgradient	1,1-Dichloroethane	14	14	5.4	NA	5	U	NA		5	U	No	No
MW2	Downgradient	1,1-Dichloroethene	32.9	NA	30.6	NA	17		NA		13		No	NA
MW2	Downgradient	cis-1,2-Dichloroethene	250	NA	131	NA	52		NA		37		No	NA
MW2	Downgradient	Tetrachloroethene	40	45.8	23.1	NA	23		NA		17		No	No
MW2	Downgradient	Trichloroethene	310	340	293	NA	230		NA		150		No	No
MW2	Downgradient	Vinyl Chloride	48	NA	10	NA	4.5		NA		2	U	No	NA
MW3	Upgradient	1,1,1-Trichloroethane	52.5	NA	45.5	NA	22		NA		21		No	NA
MW3	Upgradient	1,1-Dichloroethane	14	14	5	11	5	U	NA		11		Yes	No
MW3	Upgradient	1,1-Dichloroethene	32.9	NA	36.3	NA	17		NA		17		No	NA
MW3	Upgradient	cis-1,2-Dichloroethene	250	NA	126	NA	50		NA		74		No	NA
MW3	Upgradient	Tetrachloroethene	40	45.8	39.7	NA	25		NA		28		No	NA
MW3	Upgradient	Trichloroethene	310	340	310	NA	230		NA		170		No	No
MW3	Upgradient	Vinyl Chloride	48	NA	2	NA	2	U	NA		2	U	No	NA
MW4	Downgradient	1,1,1-Trichloroethane	52.5	NA	47.2	NA	21		NA		17		No	NA
MW4	Downgradient	1,1-Dichloroethane	14	14	69.9	NA	13		NA		27		Yes	Yes
MW4	Downgradient	1,1-Dichloroethene	32.9	NA	33.0	NA	14		NA		11		No	No
MW4	Downgradient	cis-1,2-Dichloroethene	250	NA	461	NA	190		NA		180		No	No
MW4	Downgradient	Tetrachloroethene	40	45.8	5	NA	5	U	NA		5	U	No	No
MW4	Downgradient	Trichloroethene	310	340	5	NA	5	U	NA		5	U	No	No
MW4	Downgradient	Vinyl Chloride	48	48	137	NA	65		NA		74		Yes	Yes
MW5	Upgradient	1,1,1-Trichloroethane	52.5	NA	78.5	NA	35		NA		32		No	NA
MW5	Upgradient	1,1-Dichloroethane	14	14	25.8	NA	8.8		NA		6		No	No
MW5	Upgradient	1,1-Dichloroethene	32.9	NA	34.0	NA	27		NA		23		No	NA
MW5	Upgradient	cis-1,2-Dichloroethene	250	NA	519	NA	250		NA		180		No	NA
MW5	Upgradient	Tetrachloroethene	40	45.8	75.7	NA	29		NA		34		No	No
MW5	Upgradient	Trichloroethene	310	340	390	NA	200		NA		180		No	No
MW5	Upgradient	Vinyl Chloride	48	NA	15.0	NA	7.7		NA		8.8		No	NA

December 2008 Through June 2009  
 Data Summary  
 IPC/Roto-Rooter Site

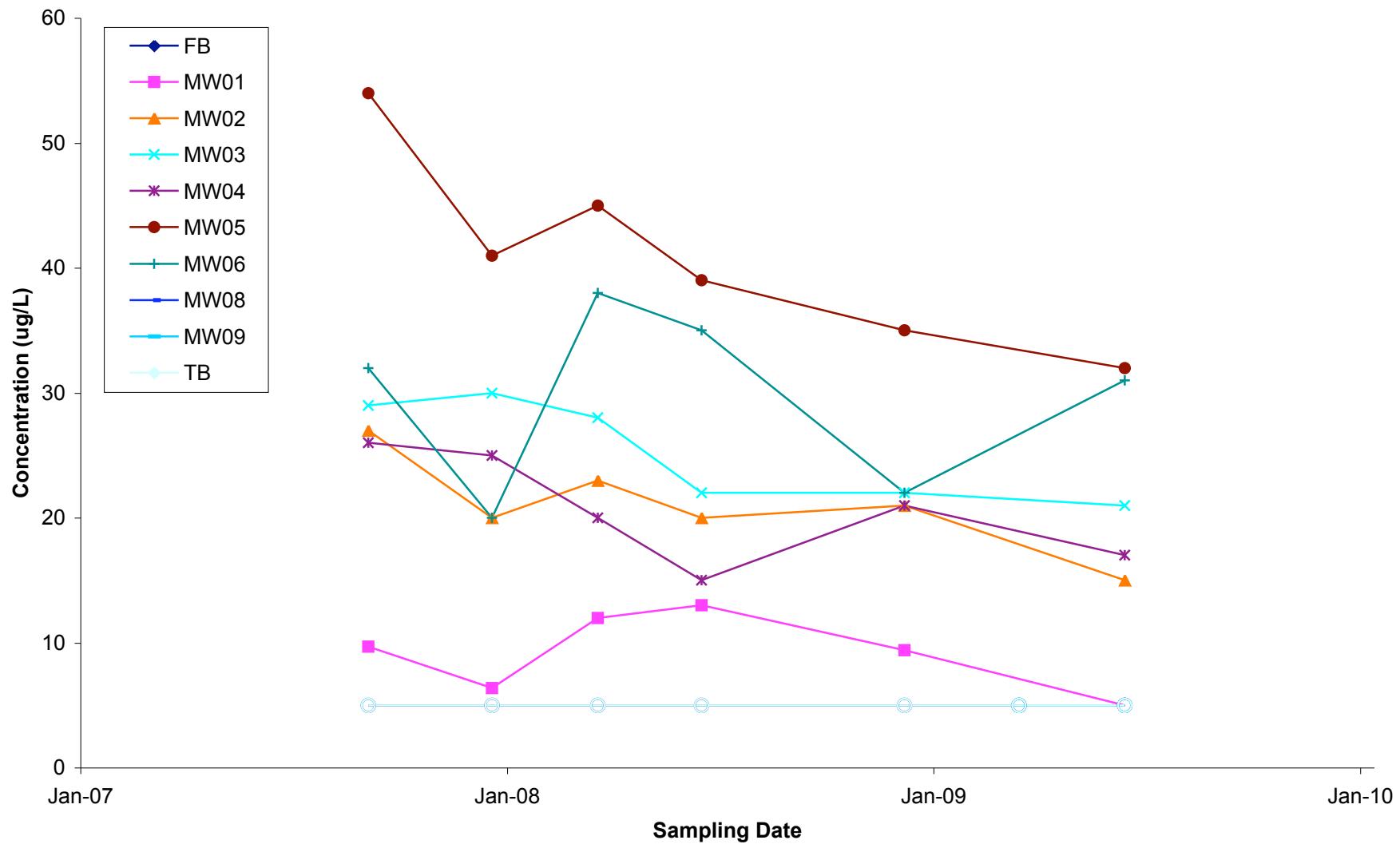
Well	Location	Parameter	Previous Interwell Upper Limit (95%)	Recalculated Interwell Upper Limit (95%)	Previous Intrawell Upper Limit (99%)	Re-Calculated Intrawell Upper Limit (99%)	Dec-08		Mar-09		Jun-09		Exceedance of Previous Limit?	Exceedance of Recalculated Limit?
							Result	Qualifier	Result	Qualifier	Result	Qualifier		
MW6	Upgradient	1,1,1-Trichloroethane	52.5	NA	71.3	NA	22		NA		31		No	NA
MW6	Upgradient	1,1-Dichloroethane	14	14	42.1	NA	6.8		NA		5	U	No	No
MW6	Upgradient	1,1-Dichloroethene	32.9	NA	36.5	NA	15		NA		22		No	NA
MW6	Upgradient	cis-1,2-Dichloroethene	250	NA	352	NA	200		NA		210		No	NA
MW6	Upgradient	Tetrachloroethene	40	45.8	5	47.6	6.1		NA		15		Yes	No
MW6	Upgradient	Trichloroethene	310	340	29.8	220	32		NA		73		Yes	No
MW6	Upgradient	Vinyl Chloride	48	NA	104	NA	24		NA		25		No	NA
MW8	Downgradient	1,1,1-Trichloroethane	52.5	NA	NA	NA			5	U	5	U	NA	NA
MW8	Downgradient	1,1-Dichloroethane	14	14	NA	NA			5	U	5	U	NA	NA
MW8	Downgradient	1,1-Dichloroethene	32.9	NA	NA	NA			5	U	5	U	NA	NA
MW8	Downgradient	cis-1,2-Dichloroethene	250	NA	NA	NA			11		5	U	NA	NA
MW8	Downgradient	Tetrachloroethene	40	45.8	NA	NA			5	U	5	U	NA	NA
MW8	Downgradient	Trichloroethene	310	340	NA	NA			27		14		NA	NA
MW8	Downgradient	Vinyl Chloride	48	NA	NA	NA			2	U	2	U	NA	NA
MW9	Downgradient	1,1,1-Trichloroethane	52.5	NA	NA	NA			5	U	5	U	NA	NA
MW9	Downgradient	1,1-Dichloroethane	14	14	NA	NA			5	U	5	U	NA	NA
MW9	Downgradient	1,1-Dichloroethene	32.9	NA	NA	NA			5	U	5	U	NA	NA
MW9	Downgradient	cis-1,2-Dichloroethene	250	NA	NA	NA			5	U	5	U	NA	NA
MW9	Downgradient	Tetrachloroethene	40	45.8	NA	NA			5	U	5	U	NA	NA
MW9	Downgradient	Trichloroethene	310	340	NA	NA			5	U	5	U	NA	NA
MW9	Downgradient	Vinyl Chloride	48	NA	NA	NA			2	U	2	U	NA	NA

All data reported in ug/L.

NA - Not Applicable

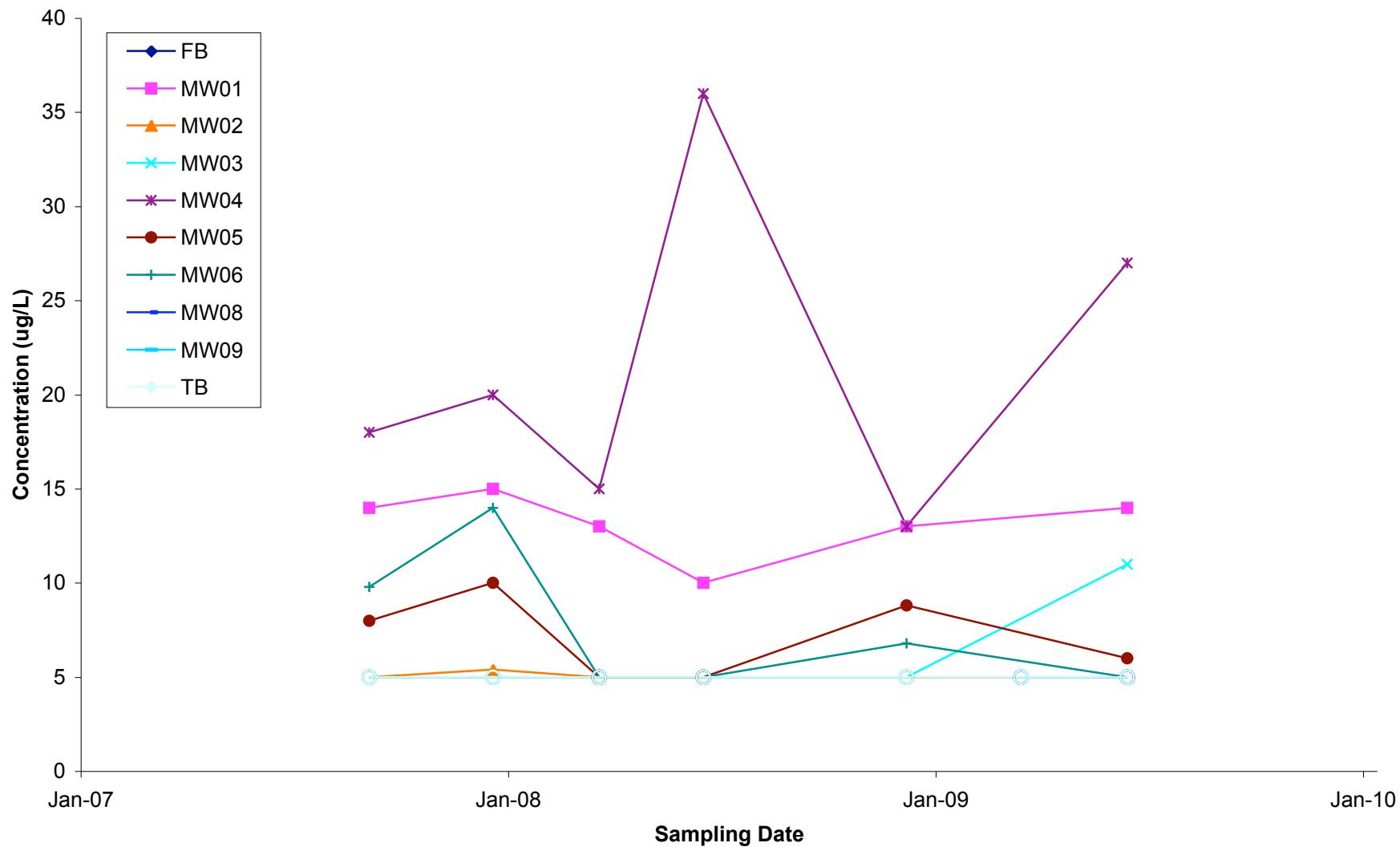
## 1,1,1-Trichloroethane in Select Wells IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



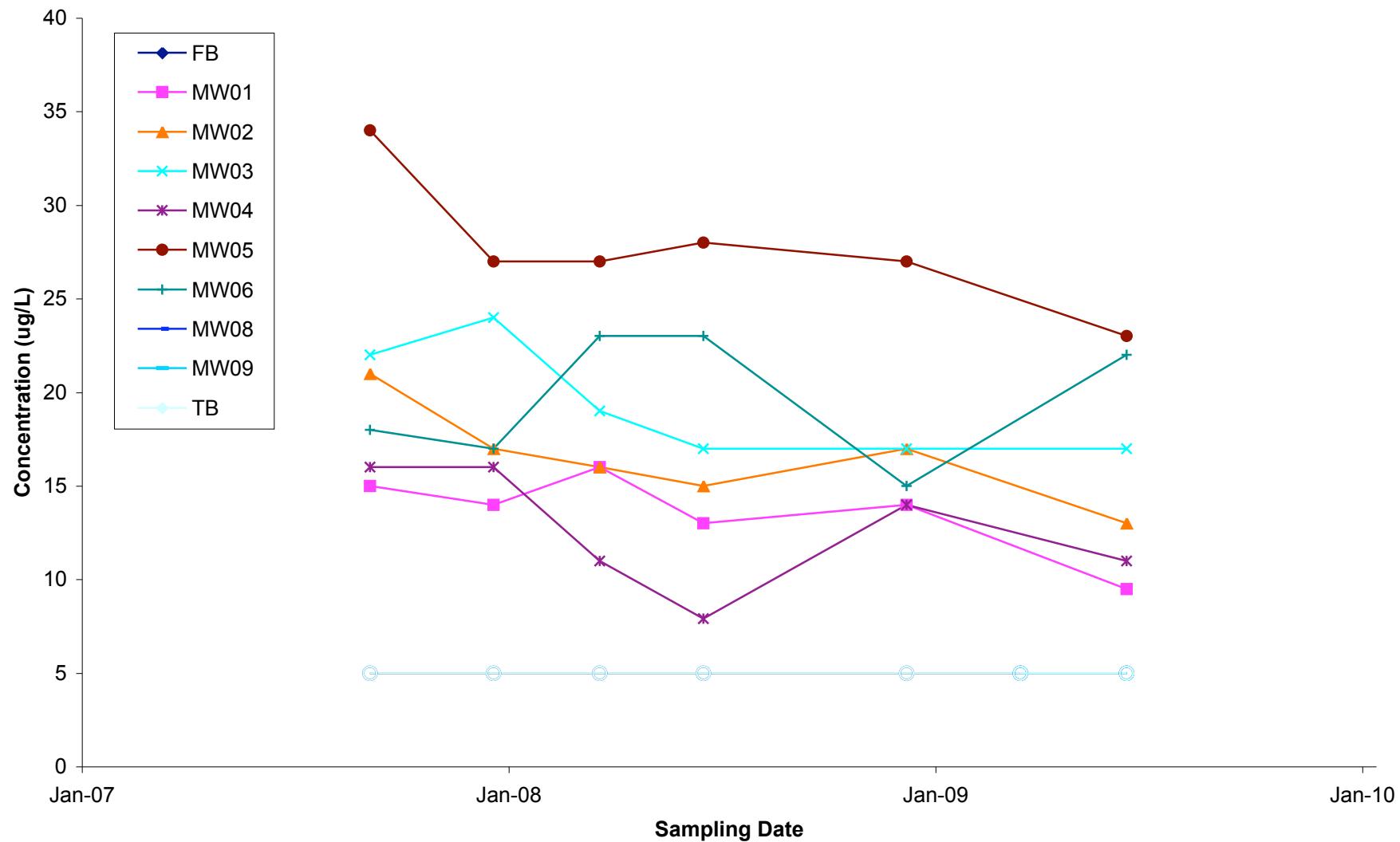
## **1,1-Dichloroethane in Select Wells IPC/Roto-Rooter Site**

Note: Non-detects are marked with a clear circle.



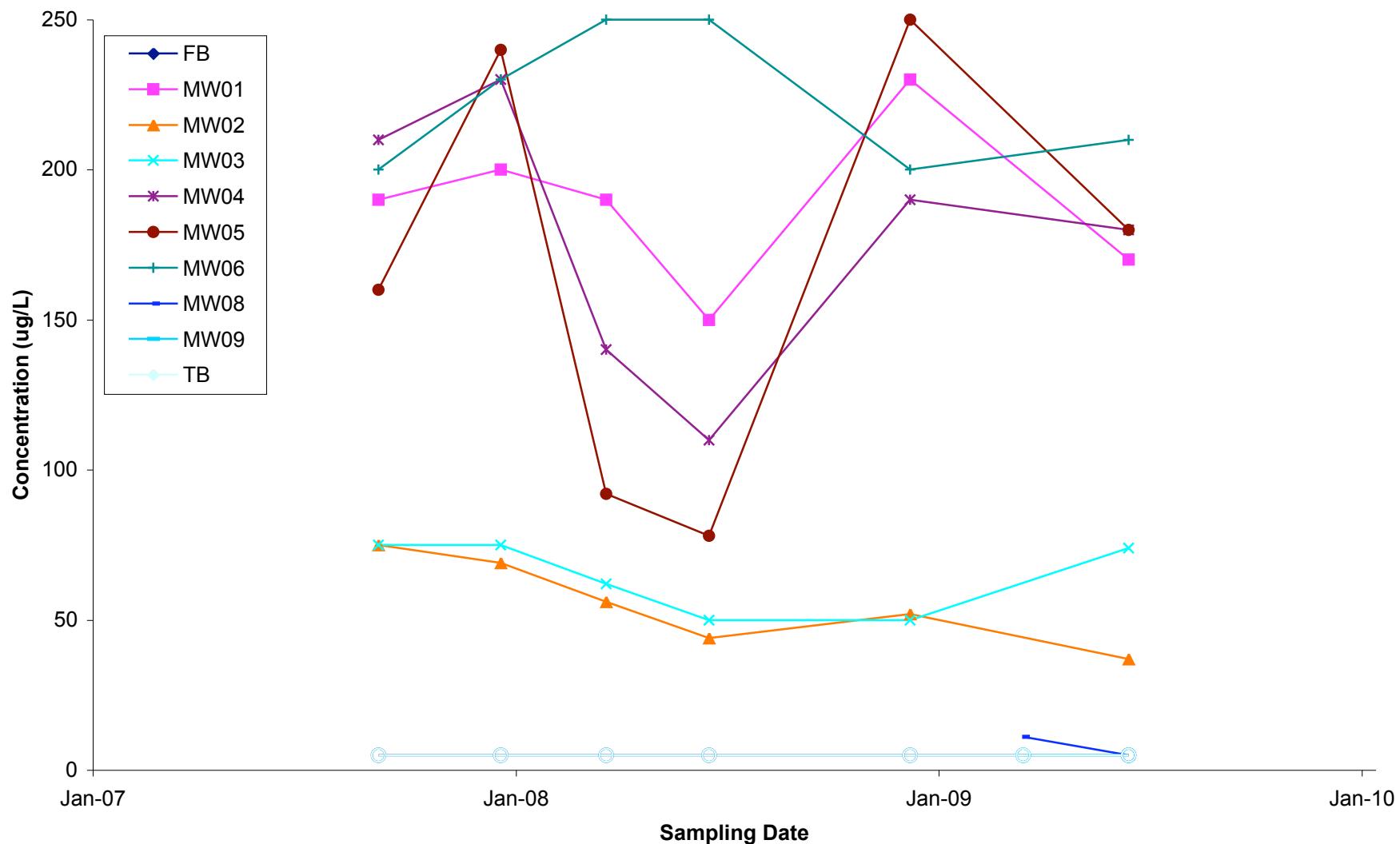
## 1,1-Dichloroethene in Select Wells IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



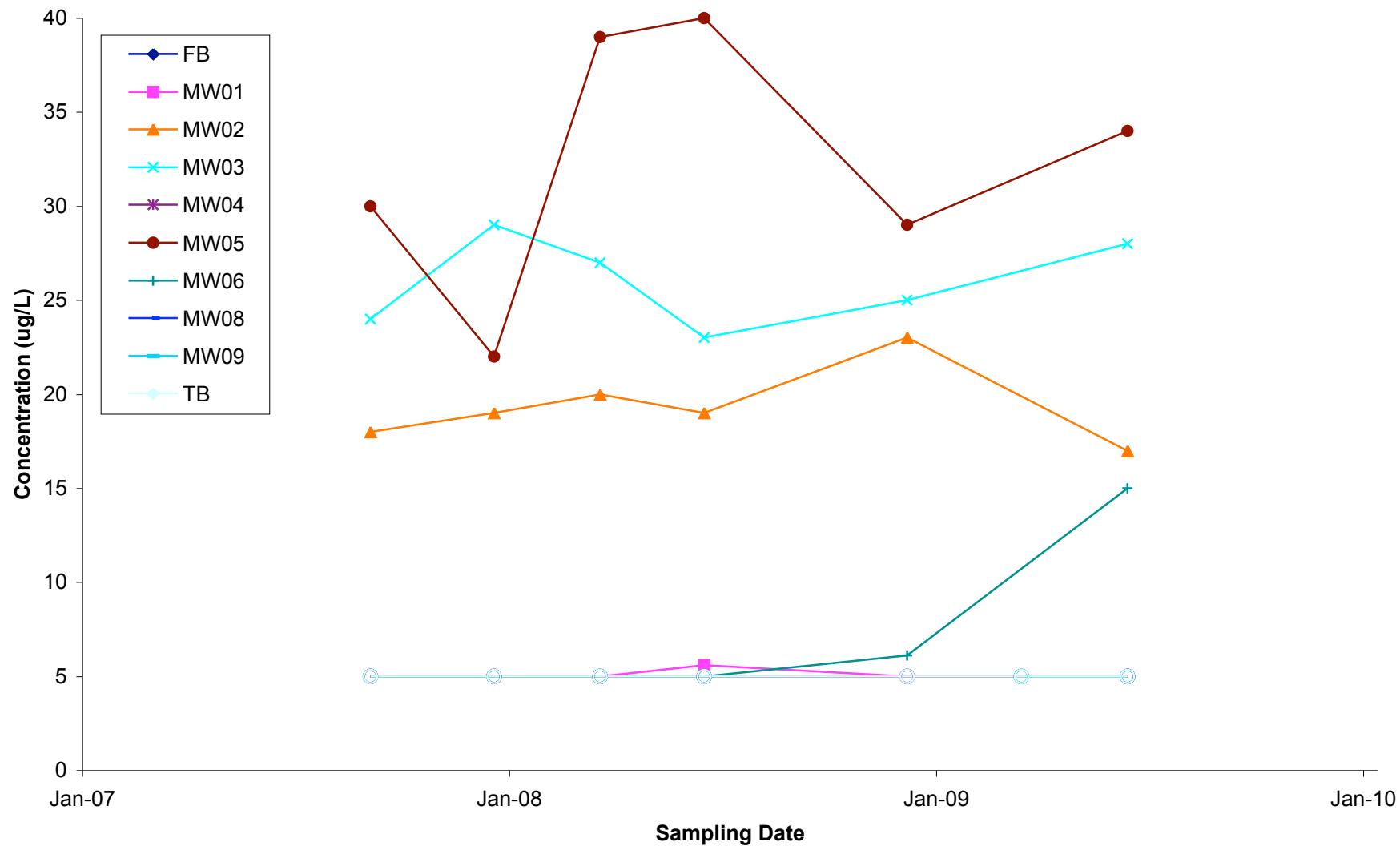
### cis-1,2-Dichloroethene in Select Wells IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



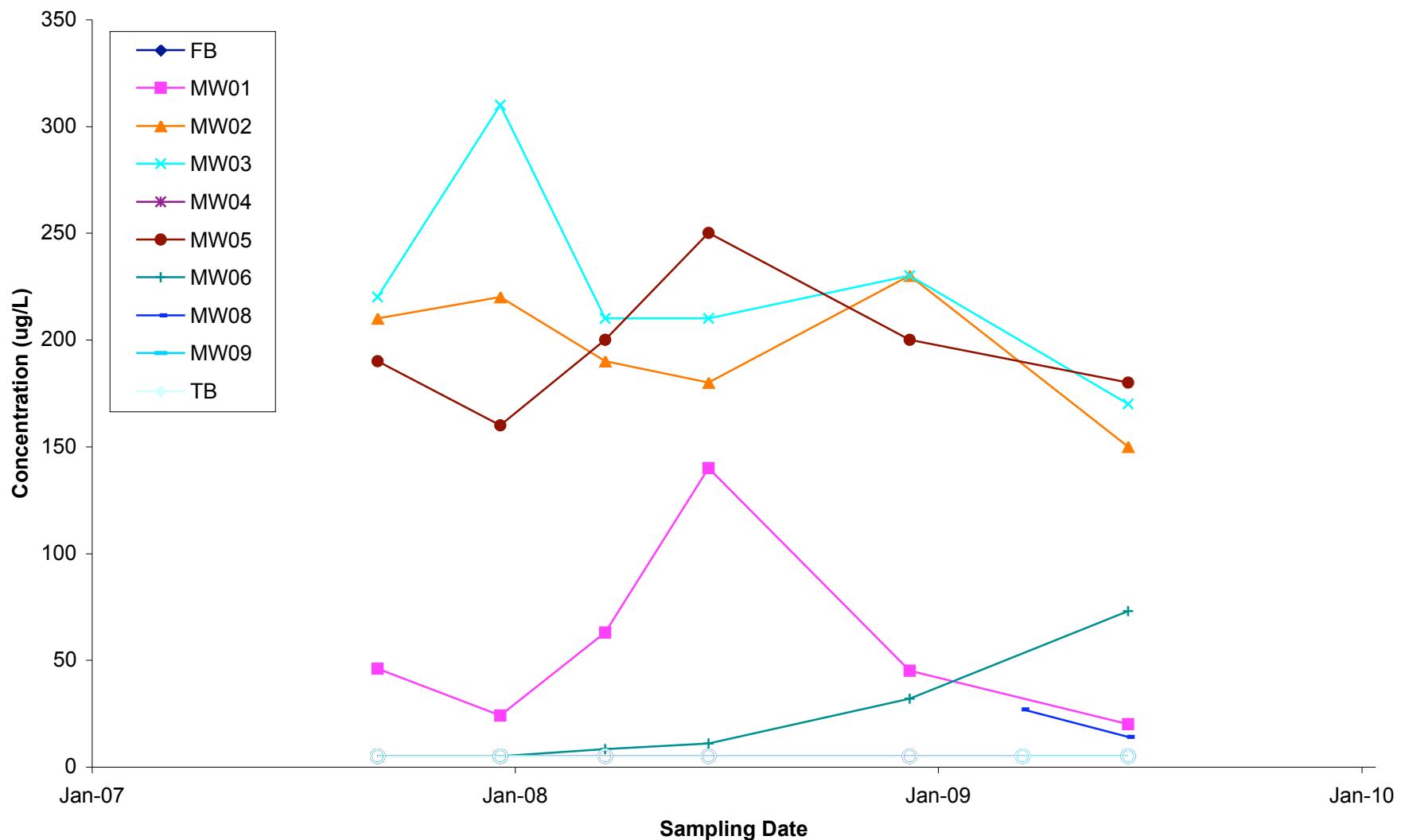
## Tetrachloroethene in Select Wells IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



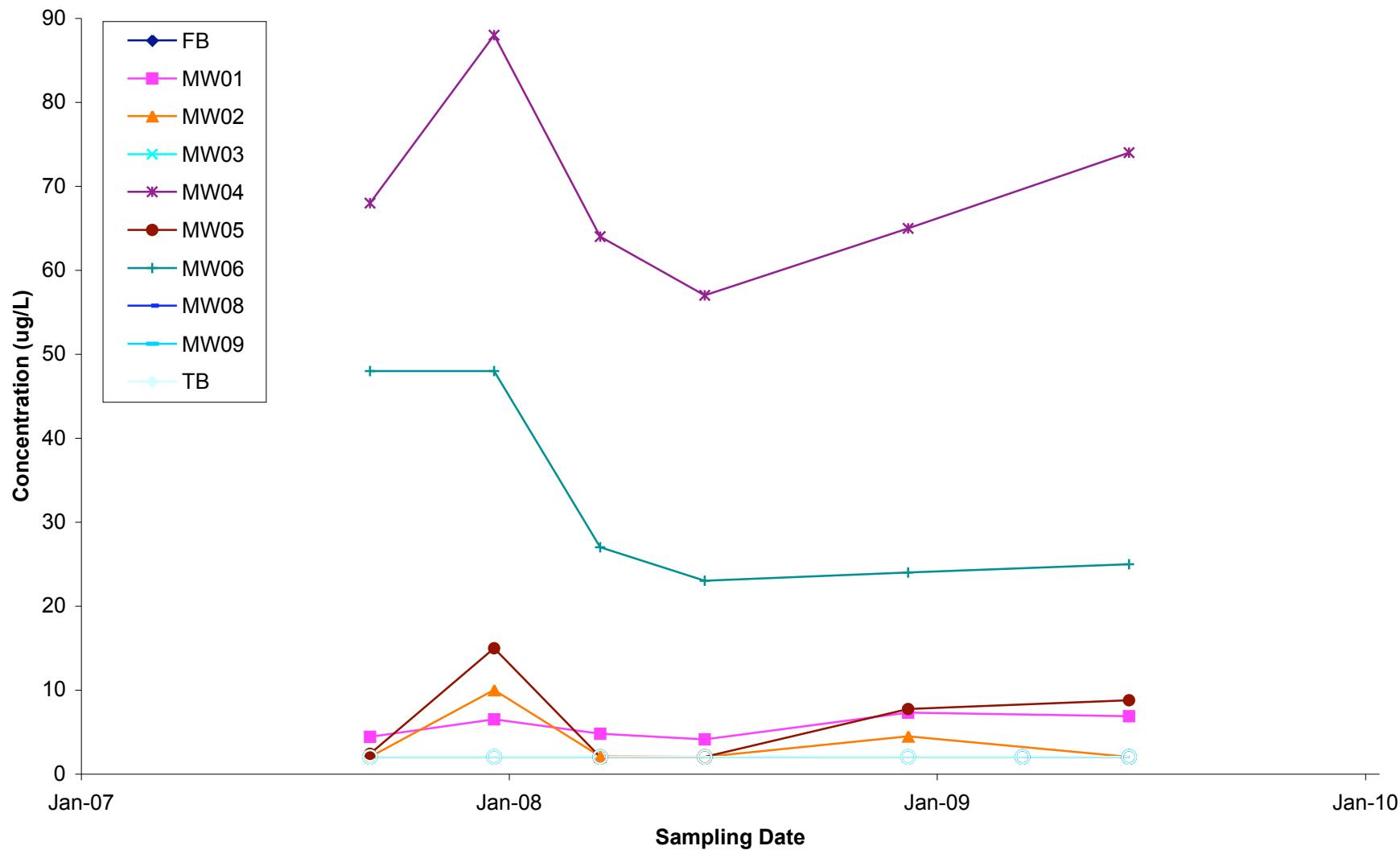
## Trichloroethene in Select Wells IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



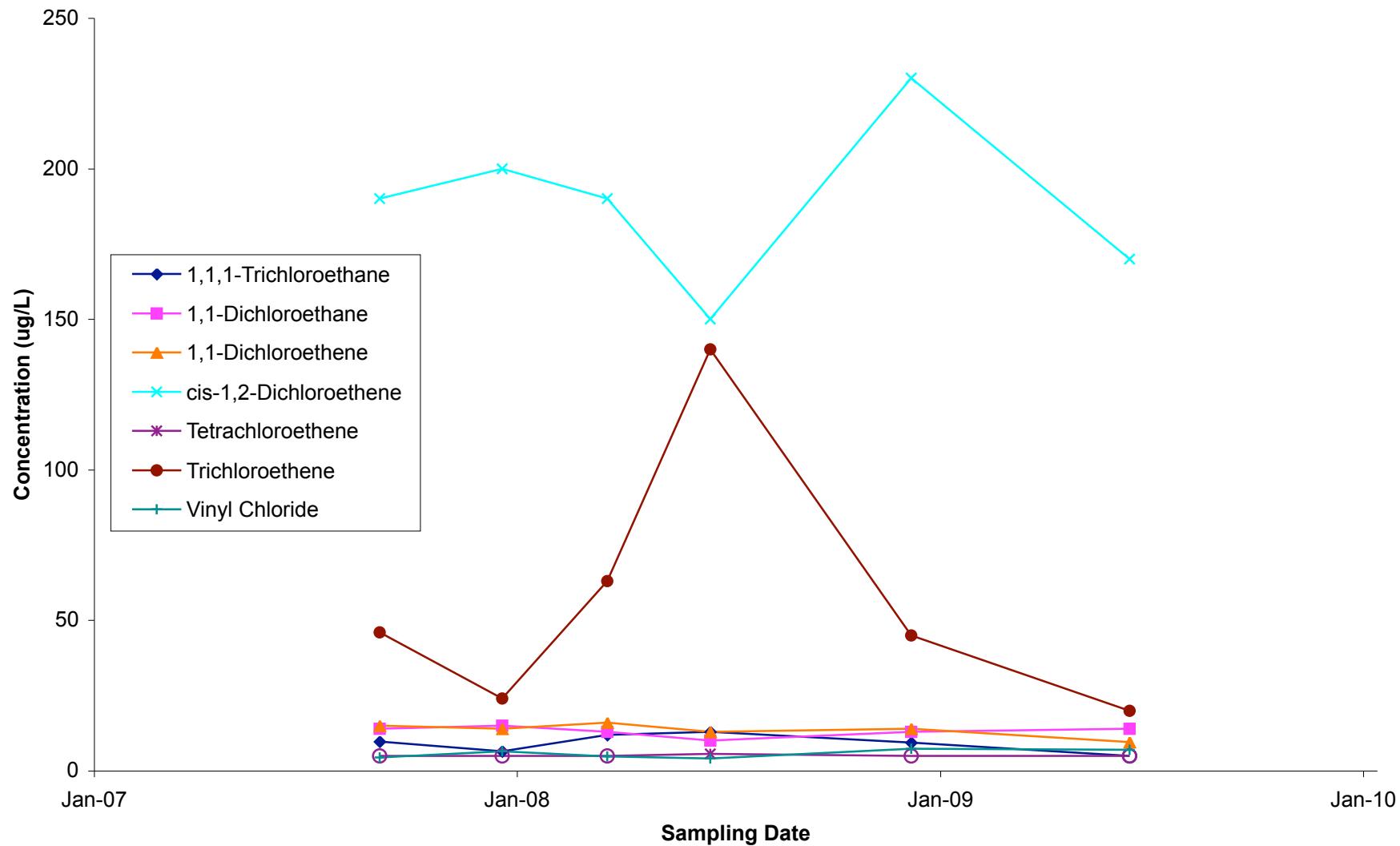
## Vinyl Chloride in Select Wells IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



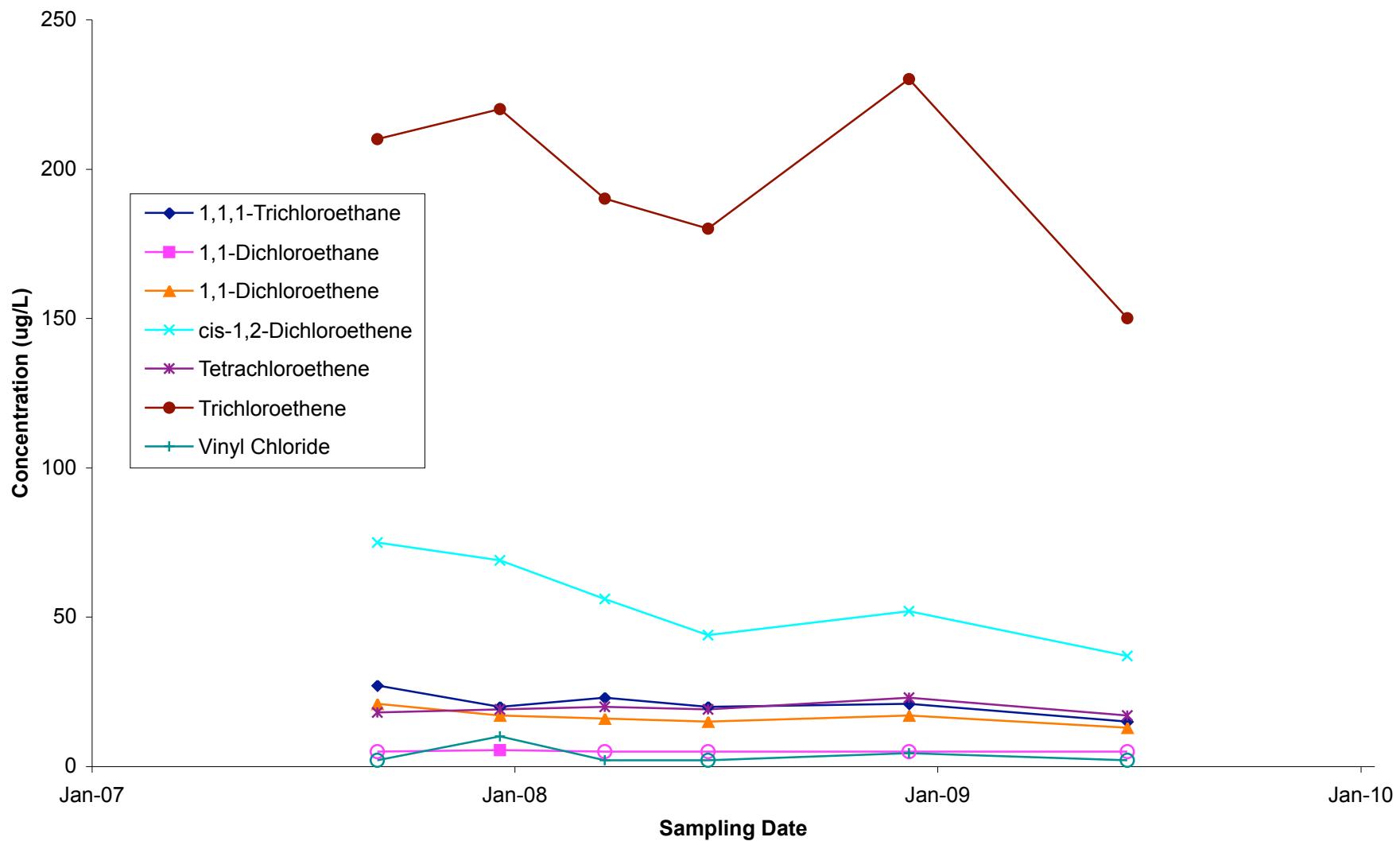
## Select Parameters in Well MW01 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



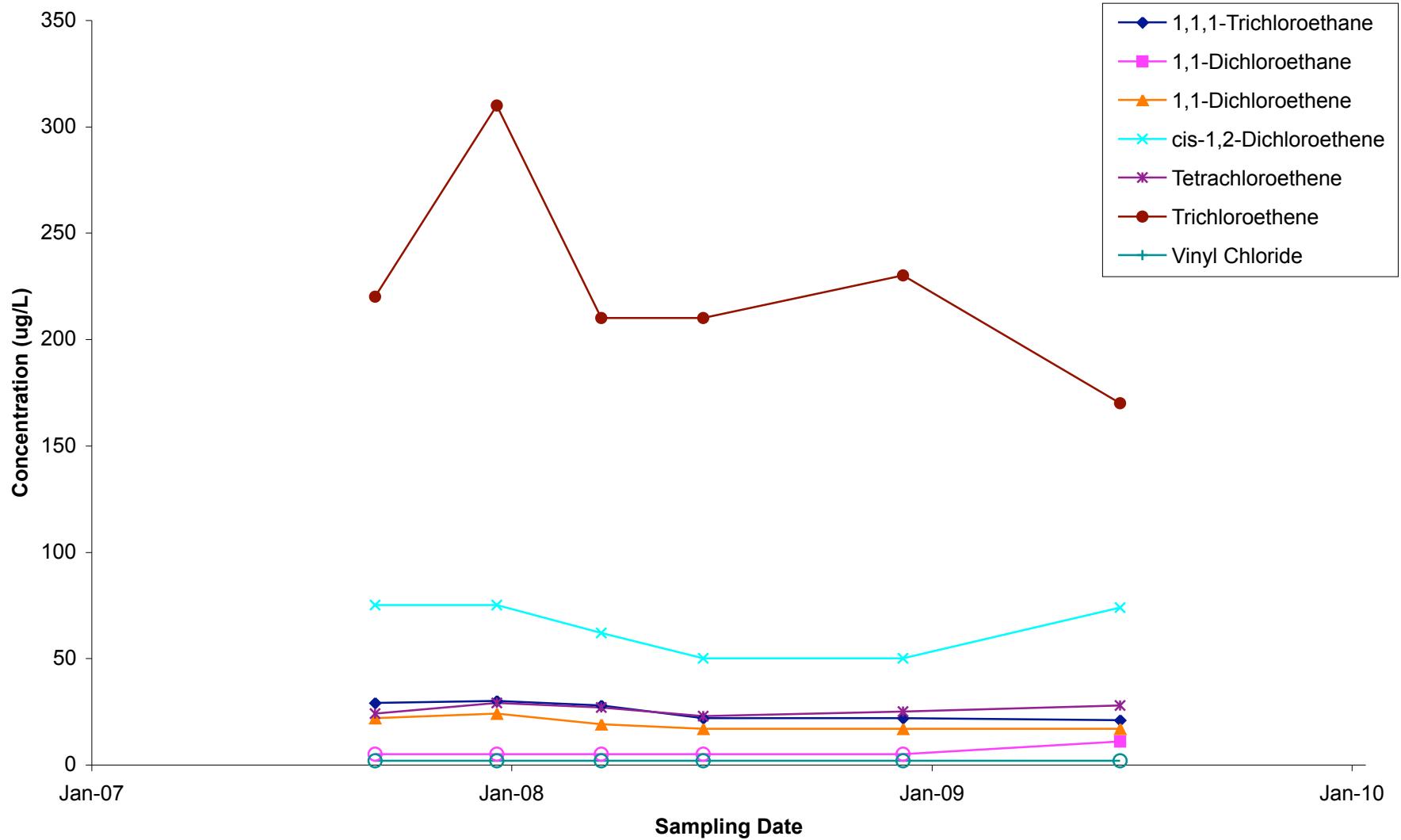
## Select Parameters in Well MW02 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



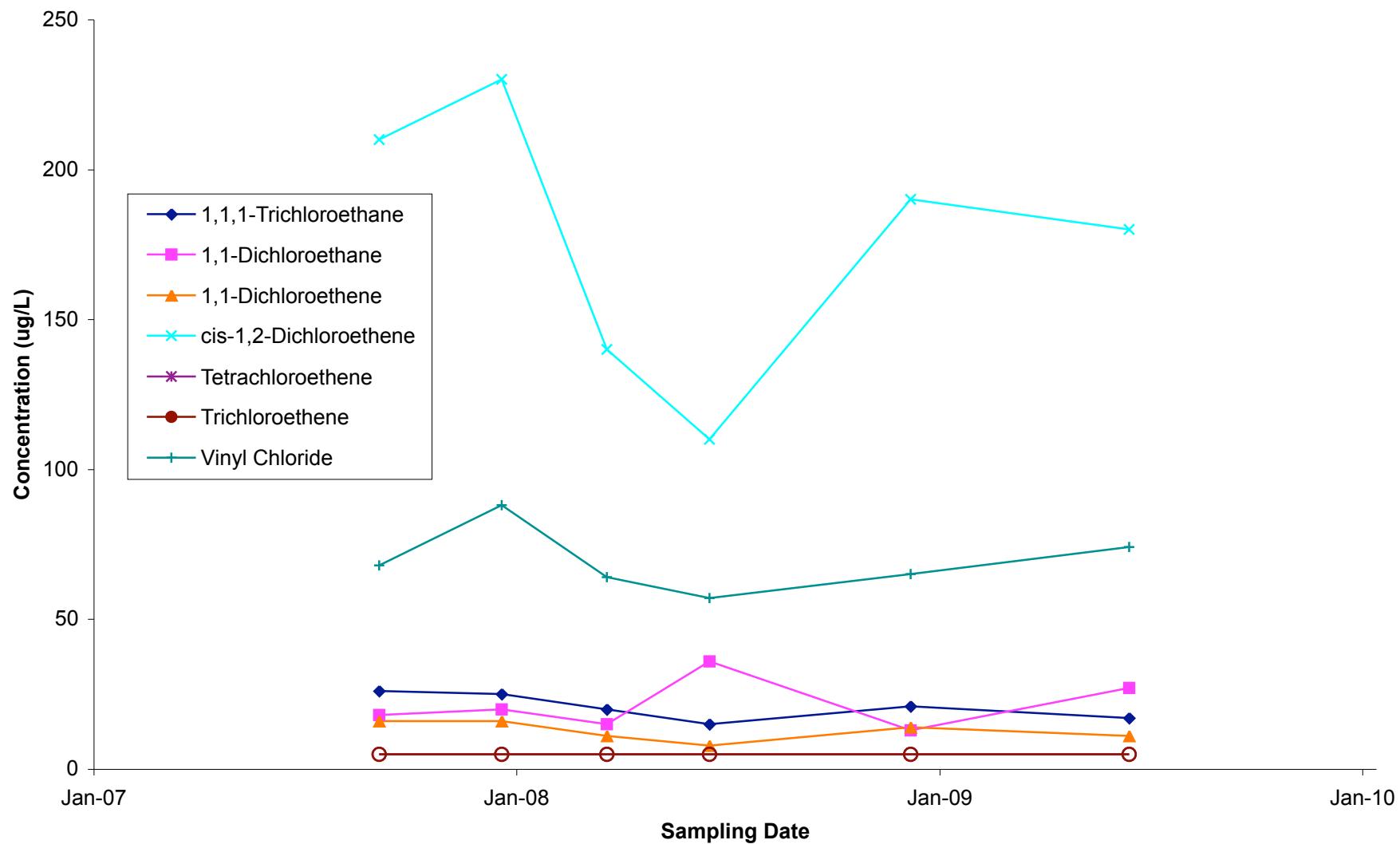
## Select Parameters in Well MW03 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



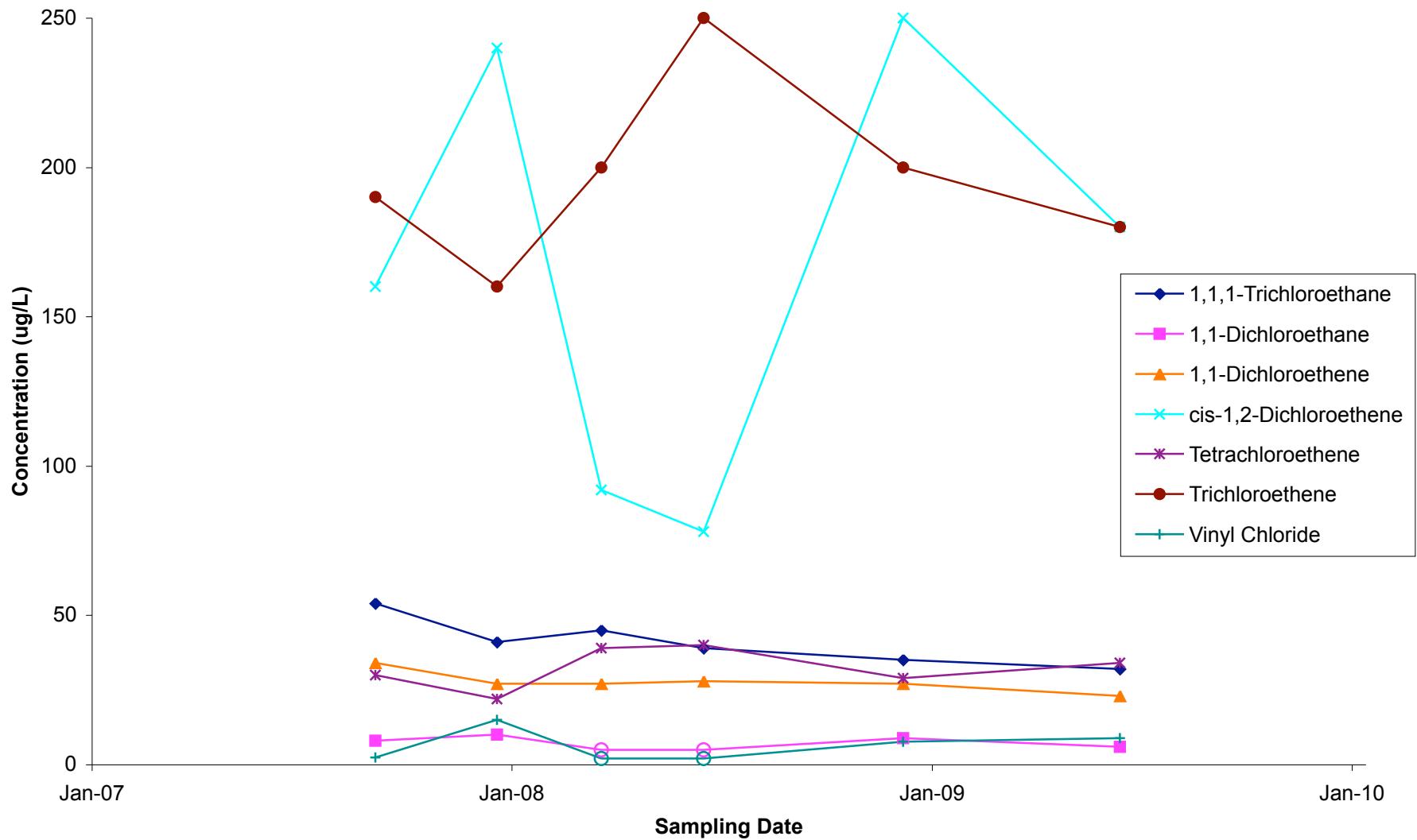
## Select Parameters in Well MW04 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



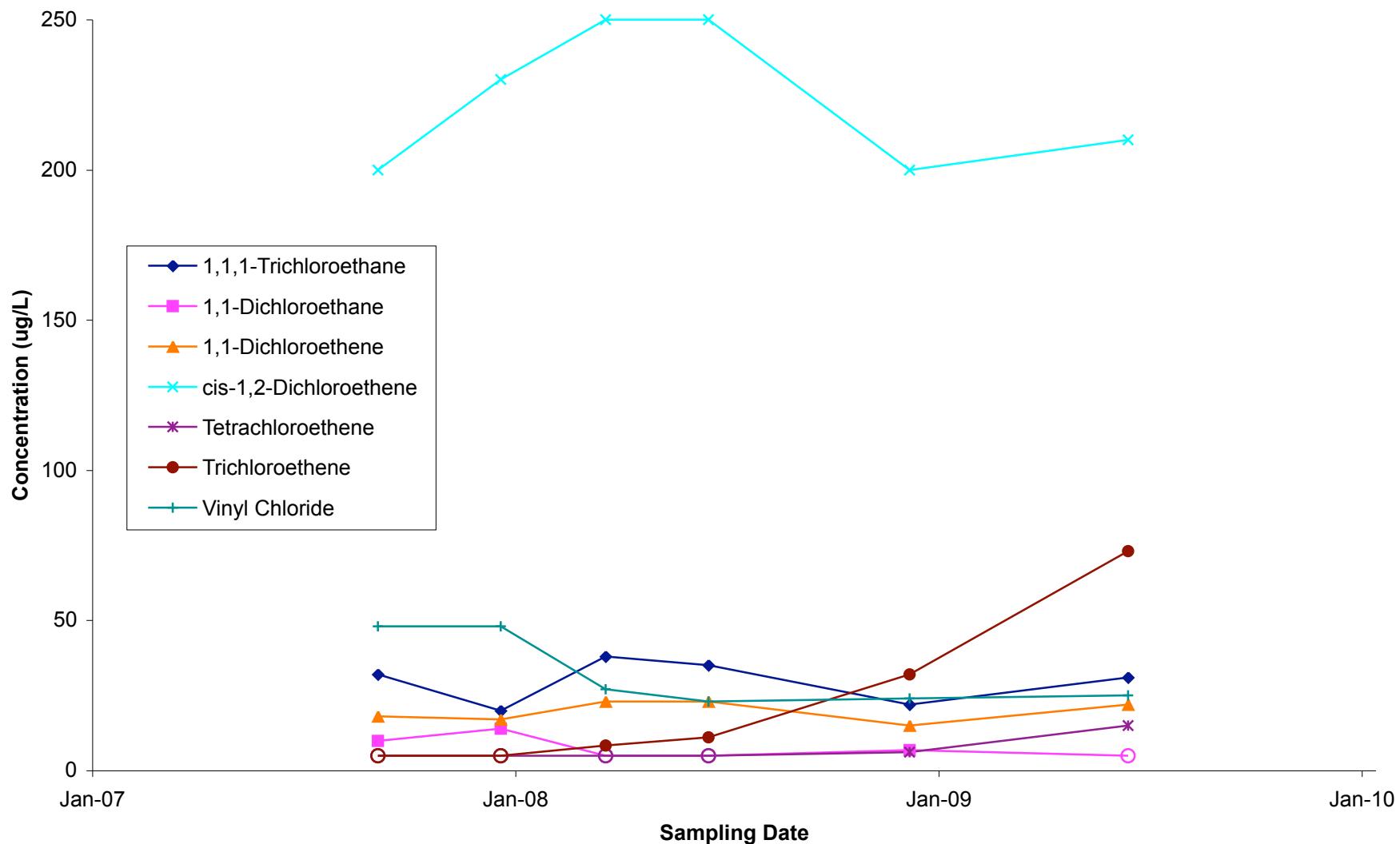
## Select Parameters in Well MW05 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



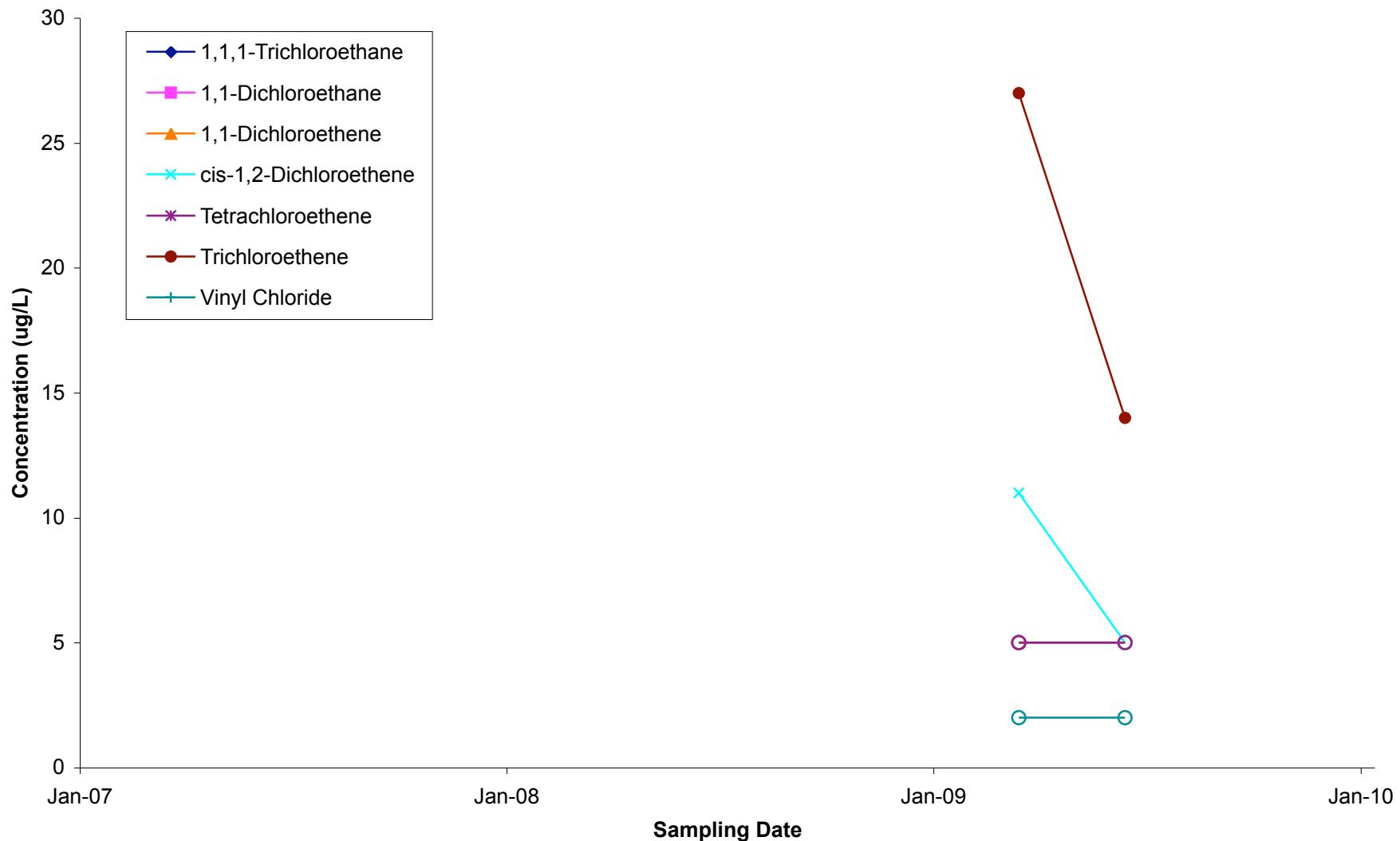
## Select Parameters in Well MW06 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



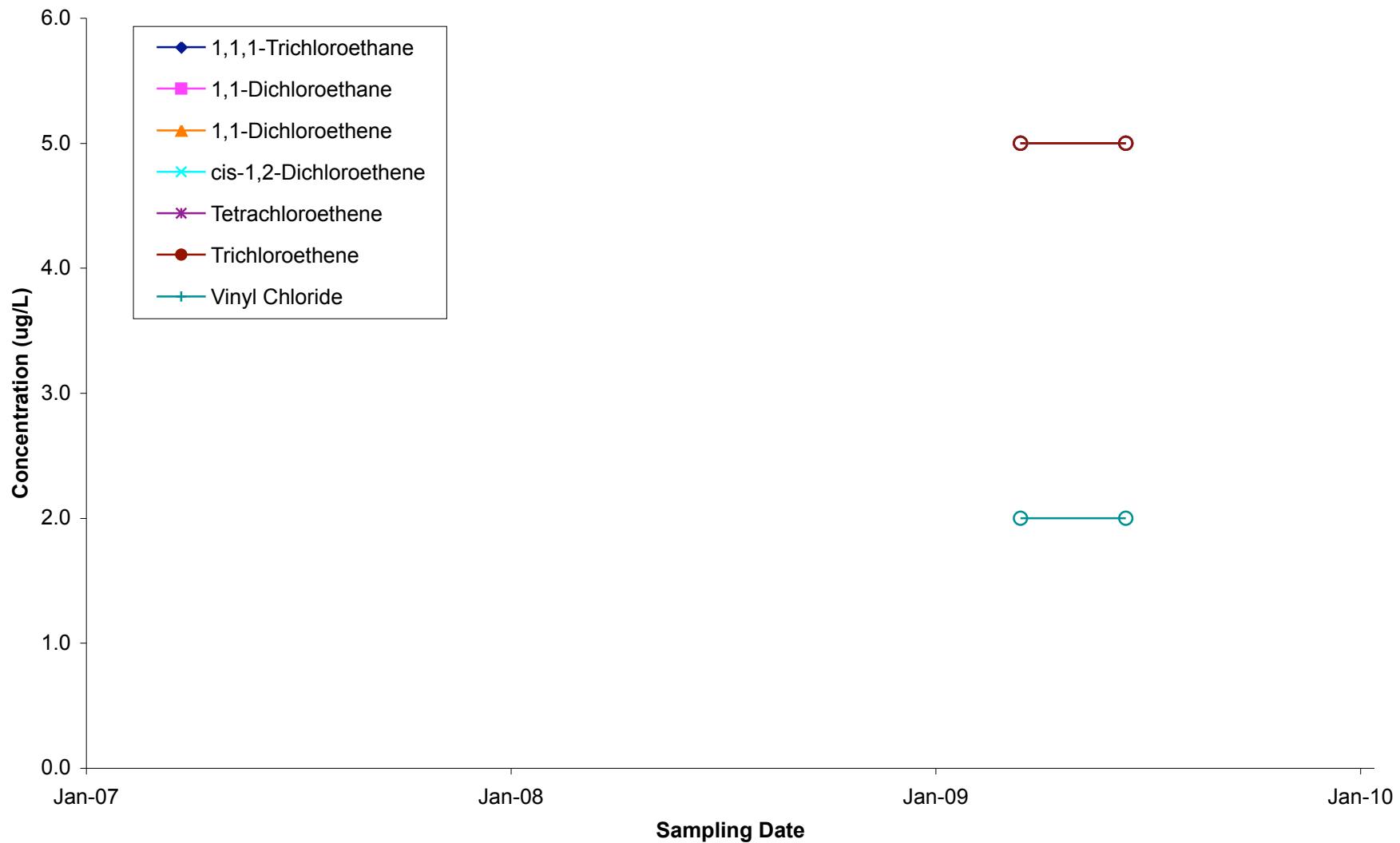
## Select Parameters in Well MW08 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



## Select Parameters in Well MW09 IPC/Roto-Rooter Site

Note: Non-detects are marked with a clear circle.



## Data Validation Checklist

Date: 1/27/2009

Validator Name: Mary Pearson (EIL)

Facility: Interstate Pollution Control - Roto Rooter

Facility Location: Rockford, Illinois

Event: Dec-08

Laboratory: TestAmerica - Chicago

Sampling Dates: 12/8/2008

Laboratory Job No: 500-15867-1 (Analysis Batch 500-54076)

	Yes	No	NA
Were the correct analytical methodologies used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Trichloroethene was detected in well MW1 at 45 ug/L and the associated field duplicate at 33 ug/L (RPD = 31%)

## Duplicate Sample Evaluation

December 2008

IPC - Roto Rooter Site

Parameter	Sample Date	Units	MW1	Qualifer	Duplicate	Qualifer	RPD
1,1,1-Trichloroethane	12/8/2008	ug/L	9.4		7.9		17%
1,1,2,2-Tetrachloroethane	12/8/2008	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	12/8/2008	ug/L	5	U	5	U	0%
1,1-Dichloroethane	12/8/2008	ug/L	13		13		0%
1,1-Dichloroethene	12/8/2008	ug/L	14		13		7.4%
1,2-Dichloroethane	12/8/2008	ug/L	5	U	5	U	0%
1,2-Dichloropropane	12/8/2008	ug/L	5	U	5	U	0%
2-Hexanone	12/8/2008	ug/L	20	U	20	U	0%
Acetone	12/8/2008	ug/L	20	U	20	U	0%
Benzene	12/8/2008	ug/L	5	U	5	U	0%
Bromodichloromethane	12/8/2008	ug/L	5	U	5	U	0%
Bromoform	12/8/2008	ug/L	5	U	5	U	0%
Bromomethane	12/8/2008	ug/L	5	U	5	U	0%
Carbon disulfide	12/8/2008	ug/L	5	U	5	U	0%
Carbon tetrachloride	12/8/2008	ug/L	5	U	5	U	0%
Chlorobenzene	12/8/2008	ug/L	5	U	5	U	0%
Chloroethane	12/8/2008	ug/L	5	U	5	U	0%
Chloroform	12/8/2008	ug/L	5	U	5	U	0%
Chloromethane	12/8/2008	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	12/8/2008	ug/L	230		200		14%
cis-1,3-Dichloropropene	12/8/2008	ug/L	5	U	5	U	0%
Dibromochloromethane	12/8/2008	ug/L	5	U	5	U	0%
Ethylbenzene	12/8/2008	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	12/8/2008	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	12/8/2008	ug/L	20	U	20	U	0%
Methylene Chloride	12/8/2008	ug/L	10	U	10	U	0%
Styrene	12/8/2008	ug/L	5	U	5	U	0%
Tetrachloroethene	12/8/2008	ug/L	5	U	5	U	0%
Toluene	12/8/2008	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	12/8/2008	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	12/8/2008	ug/L	5	U	5	U	0%
Trichloroethene	12/8/2008	ug/L	45		33		31%
Vinyl chloride	12/8/2008	ug/L	7.3		7.2		1.4%
Xylenes, Total	12/8/2008	ug/L	5	U	5	U	0%

Blind field duplicate sample MW7 was collected from well MW1.

Qualifier U - Not Detected

## Data Validation Checklist

Date: 7/8/2009

Validator Name: Mary Pearson (EIL)

Facility: Interstate Pollution Control - Roto Rooter

Facility Location: Rockford, Illinois

Event: Jun-09

Laboratory: TestAmerica - Chicago

Sampling Dates: 6/15/2009

Laboratory Job No: 500-19494-1 (Analysis Batch 500-66173)

	Yes	No	NA
Were the correct analytical methodologies used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1,2-Dichlorethane was recovered above the control limits in the laboratory control spike associated with analysis batch 500-66173. Well MW9 and Trip Blank were analyzed in this batch.

Laboratory Control Standard (LCS) = 125%

Control Limits = 62% - 120%

1,2-Dichloroethane was not detected in of the monitoring samples (all reported as ND at 5 ug/L).

	Yes	No	NA
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Duplicate Sample Evaluation

June 2009

IPC - Roto Rooter Site

Parameter	Sample Date	Units	MW2	Qualifer	Duplicate	Qualifer	RPD
1,1,1-Trichloroethane	6/15/2009	ug/L	15		15		0%
1,1,2,2-Tetrachloroethane	6/15/2009	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	6/15/2009	ug/L	5	U	5	U	0%
1,1-Dichloroethane	6/15/2009	ug/L	5	U	5	U	0%
1,1-Dichloroethene	6/15/2009	ug/L	13		13		0%
1,2-Dichloroethane	6/15/2009	ug/L	5	U *	5	U *	0%
1,2-Dichloropropane	6/15/2009	ug/L	5	U	5	U	0%
2-Hexanone	6/15/2009	ug/L	20	U	20	U	0%
Acetone	6/15/2009	ug/L	20	U	20	U	0%
Benzene	6/15/2009	ug/L	5	U	5	U	0%
Bromodichloromethane	6/15/2009	ug/L	5	U	5	U	0%
Bromoform	6/15/2009	ug/L	5	U	5	U	0%
Bromomethane	6/15/2009	ug/L	5	U	5	U	0%
Carbon disulfide	6/15/2009	ug/L	5	U	5	U	0%
Carbon tetrachloride	6/15/2009	ug/L	5	U	5	U	0%
Chlorobenzene	6/15/2009	ug/L	5	U	5	U	0%
Chloroethane	6/15/2009	ug/L	5	U	5	U	0%
Chloroform	6/15/2009	ug/L	5	U	5	U	0%
Chloromethane	6/15/2009	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	6/15/2009	ug/L	37		36		2.7%
cis-1,3-Dichloropropene	6/15/2009	ug/L	5	U	5	U	0%
Dibromochloromethane	6/15/2009	ug/L	5	U	5	U	0%
Ethylbenzene	6/15/2009	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	6/15/2009	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	6/15/2009	ug/L	20	U	20	U	0%
Methylene Chloride	6/15/2009	ug/L	10	U	10	U	0%
Styrene	6/15/2009	ug/L	5	U	5	U	0%
Tetrachloroethene	6/15/2009	ug/L	17		19		11%
Toluene	6/15/2009	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	6/15/2009	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	6/15/2009	ug/L	5	U	5	U	0%
Trichloroethene	6/15/2009	ug/L	150		170		13%
Vinyl chloride	6/15/2009	ug/L	2	U	2	U	0%
Xylenes, Total	6/15/2009	ug/L	5	U	5	U	0%

Blind field duplicate sample MW7 was collected from well MW2.

Qualifier U - Not Detected

\* Laboratory Control Standards recovered above the acceptance limits.

## Data Validation Checklist

Date: 3/30/2009

Validator Name: Mary Pearson (EIL)

Facility: Interstate Pollution Control - Roto Rooter

Facility Location: Rockford, Illinois

Event: Mar-09

Laboratory: TestAmerica - Chicago

Sampling Dates: 3/16/2009

Laboratory Job No: 500-17657-1 (Analysis Batch 500-60383 and 500-60423)

	Yes	No	NA
Were the correct analytical methodologies used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1,2-Dichlorethane was recovered above the control limits in the laboratory control spikes associated with analysis batch 500-60423. Well MW9 and Trip Blank were analyzed in this batch.

Laboratory Control Standard (LCS) = 121% and Laboratory Control Standard Duplicate (LCSD) = 123%  
Control Limits = 71% - 120%

1,2-Dichloroethane was not detected in well MW9 or the Trip Blank (both reported as ND at 5 ug/L).

	Yes	No	NA
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Duplicate Sample Evaluation

March 2009

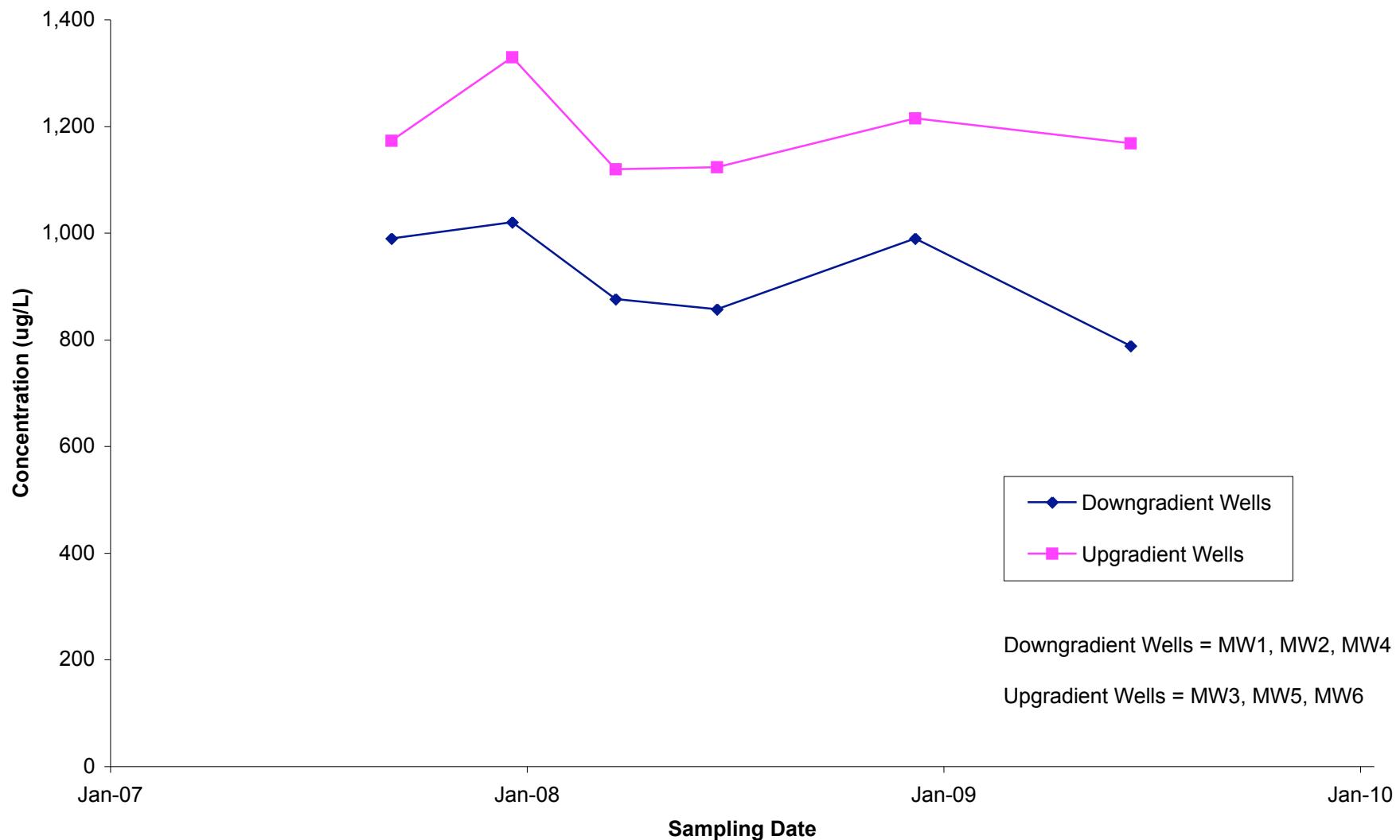
IPC - Roto Rooter Site

Parameter	Sample Date	Units	MW8	Qualifer	Duplicate	Qualifer	RPD
1,1,1-Trichloroethane	3/16/2009	ug/L	5	U	5	U	0%
1,1,2,2-Tetrachloroethane	3/16/2009	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	3/16/2009	ug/L	5	U	5	U	0%
1,1-Dichloroethane	3/16/2009	ug/L	5	U	5	U	0%
1,1-Dichloroethene	3/16/2009	ug/L	5	U	5	U	0%
1,2-Dichloroethane	3/16/2009	ug/L	5	U	5	U	0%
1,2-Dichloropropane	3/16/2009	ug/L	5	U	5	U	0%
2-Hexanone	3/16/2009	ug/L	20	U	20	U	0%
Acetone	3/16/2009	ug/L	20	U	20	U	0%
Benzene	3/16/2009	ug/L	5	U	5	U	0%
Bromodichloromethane	3/16/2009	ug/L	5	U	5	U	0%
Bromoform	3/16/2009	ug/L	5	U	5	U	0%
Bromomethane	3/16/2009	ug/L	5	U	5	U	0%
Carbon disulfide	3/16/2009	ug/L	5	U	5	U	0%
Carbon tetrachloride	3/16/2009	ug/L	5	U	5	U	0%
Chlorobenzene	3/16/2009	ug/L	5	U	5	U	0%
Chloroethane	3/16/2009	ug/L	5	U	5	U	0%
Chloroform	3/16/2009	ug/L	5	U	5	U	0%
Chloromethane	3/16/2009	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	3/16/2009	ug/L	11		13		17%
cis-1,3-Dichloropropene	3/16/2009	ug/L	5	U	5	U	0%
Dibromochloromethane	3/16/2009	ug/L	5	U	5	U	0%
Ethylbenzene	3/16/2009	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	3/16/2009	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	3/16/2009	ug/L	20	U	20	U	0%
Methylene Chloride	3/16/2009	ug/L	10	U	10	U	0%
Styrene	3/16/2009	ug/L	5	U	5	U	0%
Tetrachloroethene	3/16/2009	ug/L	5	U	5	U	0%
Toluene	3/16/2009	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	3/16/2009	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	3/16/2009	ug/L	5	U	5	U	0%
Trichloroethene	3/16/2009	ug/L	27		31		14%
Vinyl chloride	3/16/2009	ug/L	2	U	2	U	0%
Xylenes, Total	3/16/2009	ug/L	5	U	5	U	0%

Blind field duplicate sample MW7 was collected from well MW8.

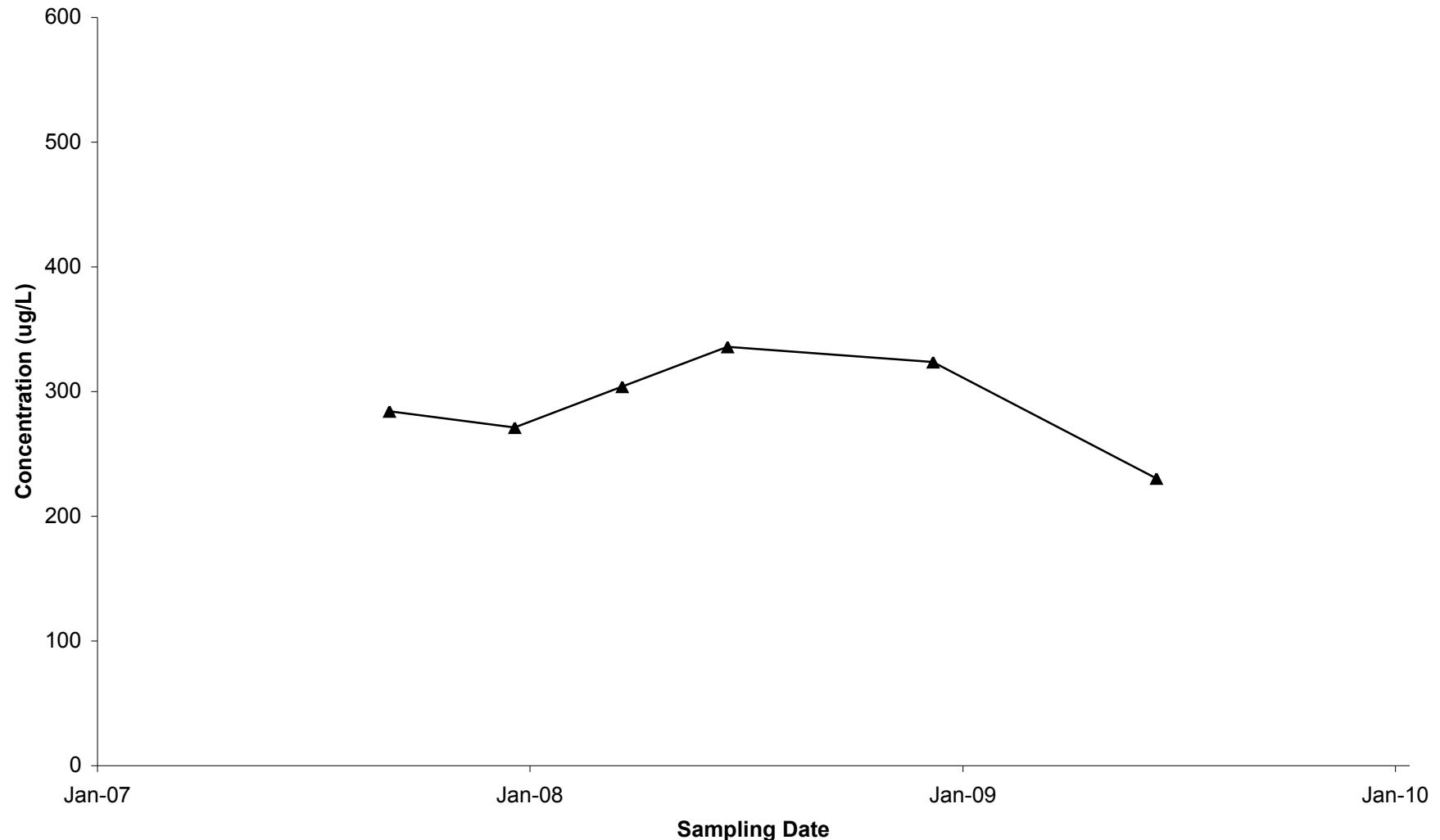
Qualifier U - Not Detected

**Total VOCs in Upgradient and Downgradient Wells**  
**IPC/Roto-Rooter Site**

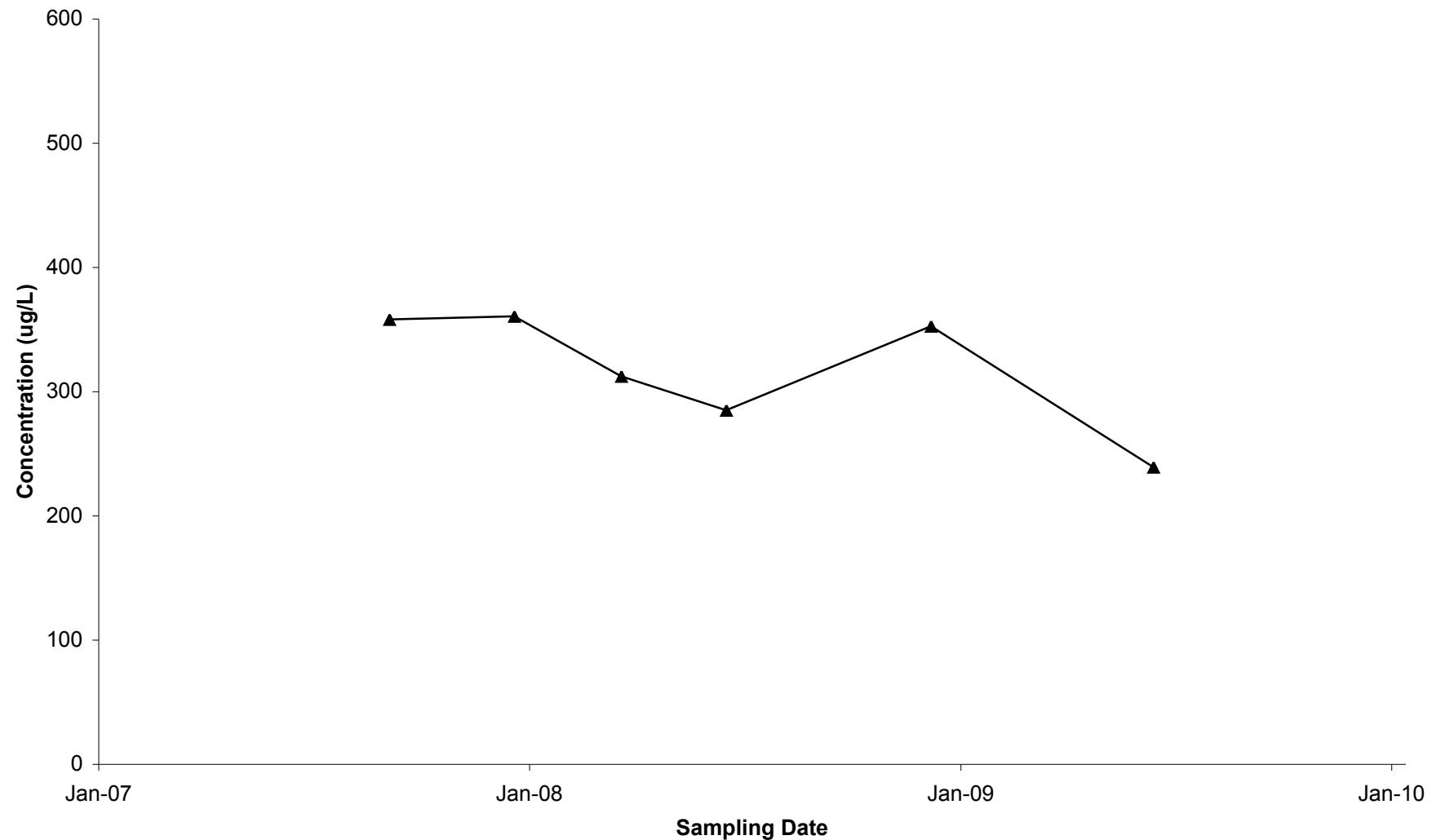




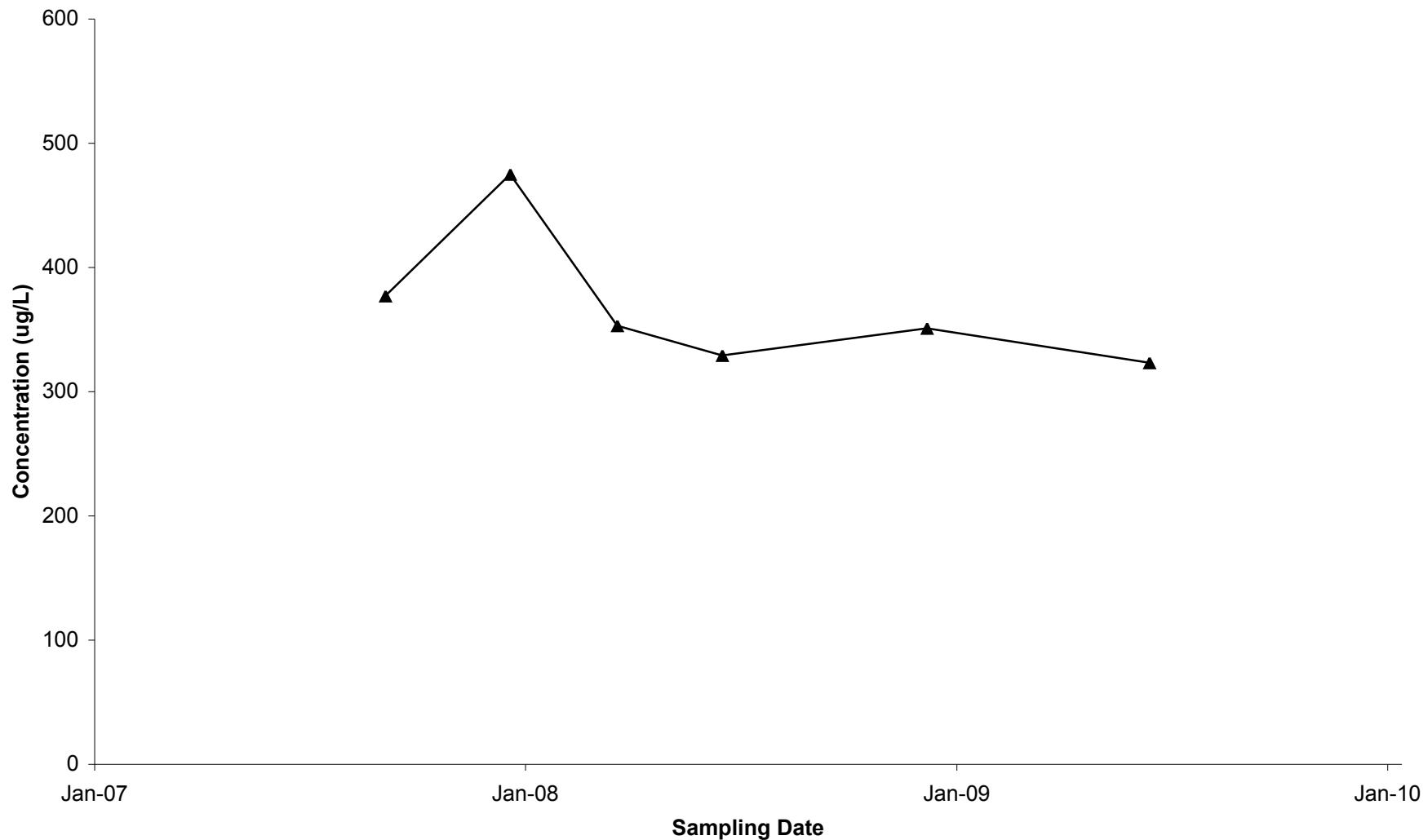
**Total VOCs in Well MW01  
IPC/Roto-Rooter Site**



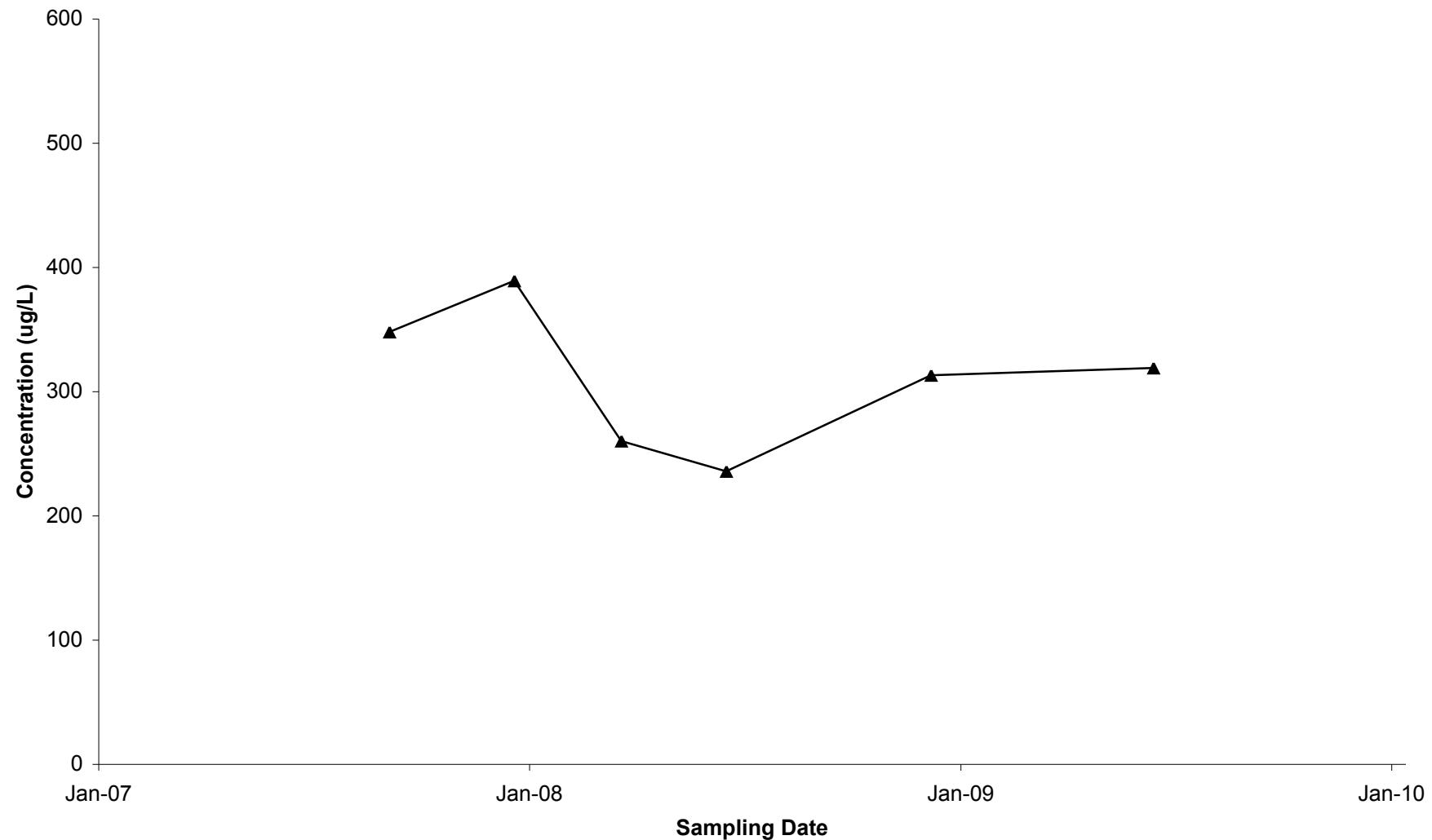
**Total VOCs in Well MW02  
IPC/Roto-Rooter Site**



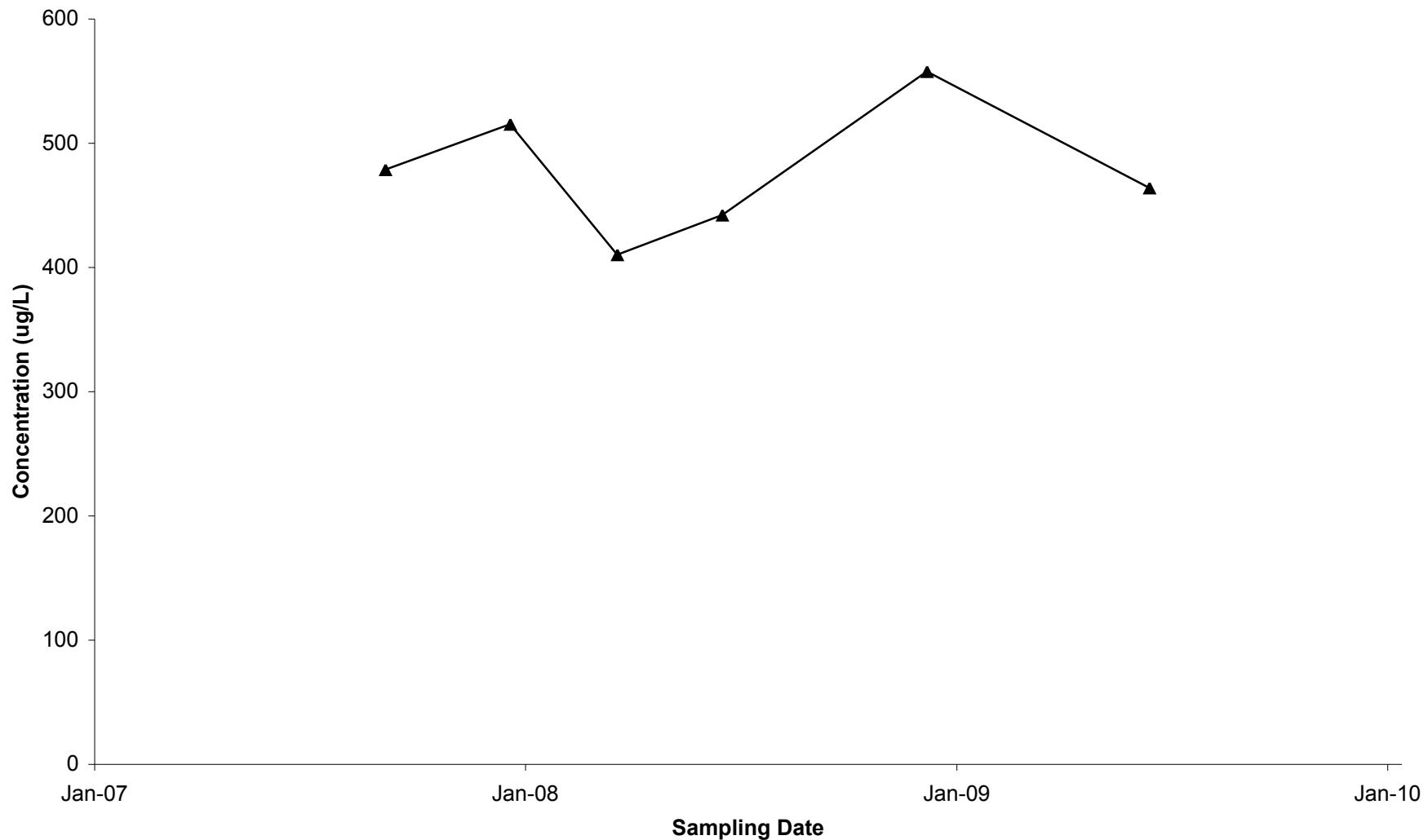
**Total VOCs in Well MW03  
IPC/Roto-Rooter Site**



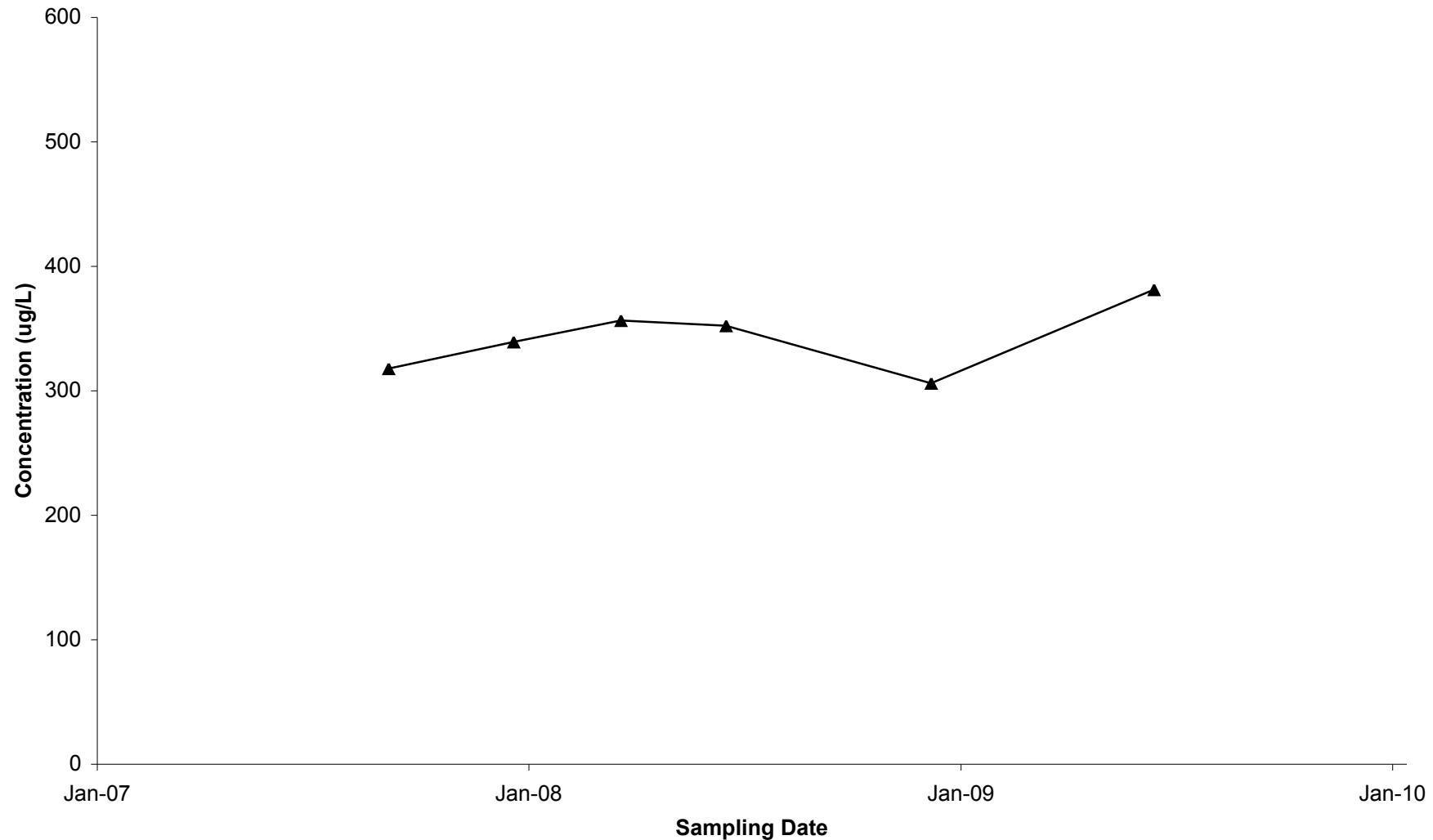
**Total VOCs in Well MW04  
IPC/Roto-Rooter Site**



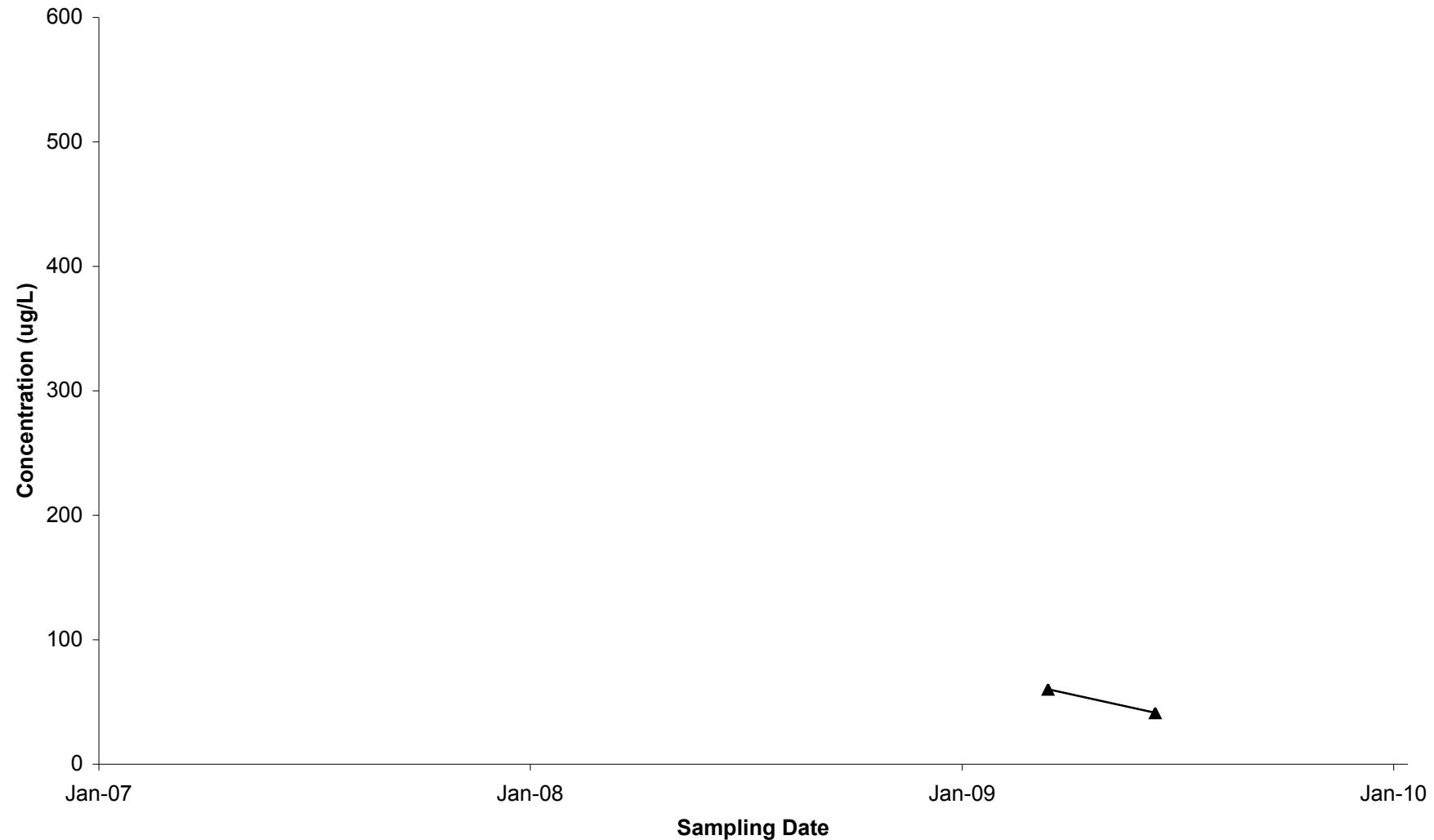
**Total VOCs in Well MW05  
IPC/Roto-Rooter Site**



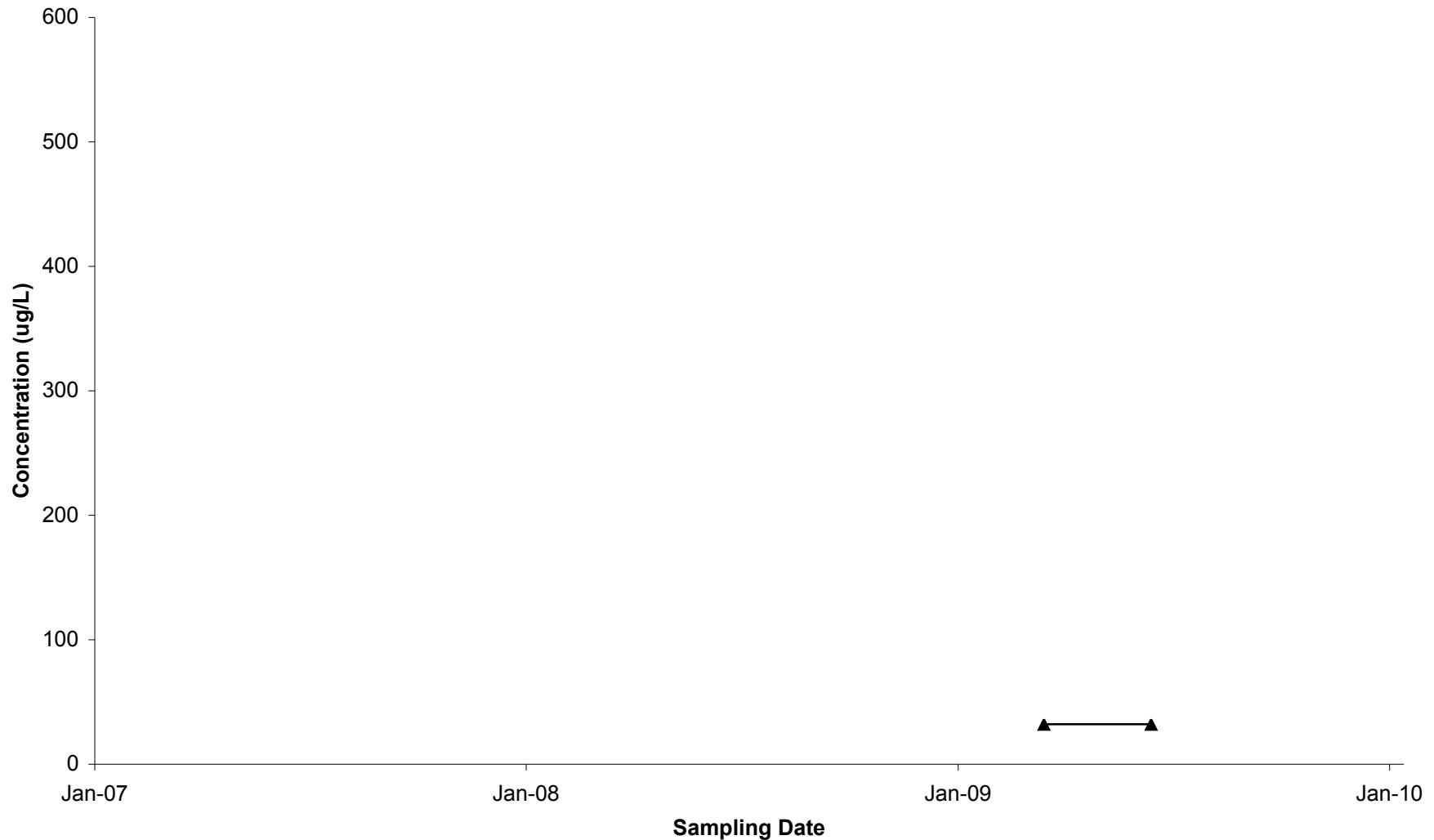
**Total VOCs in Well MW06  
IPC/Roto-Rooter Site**

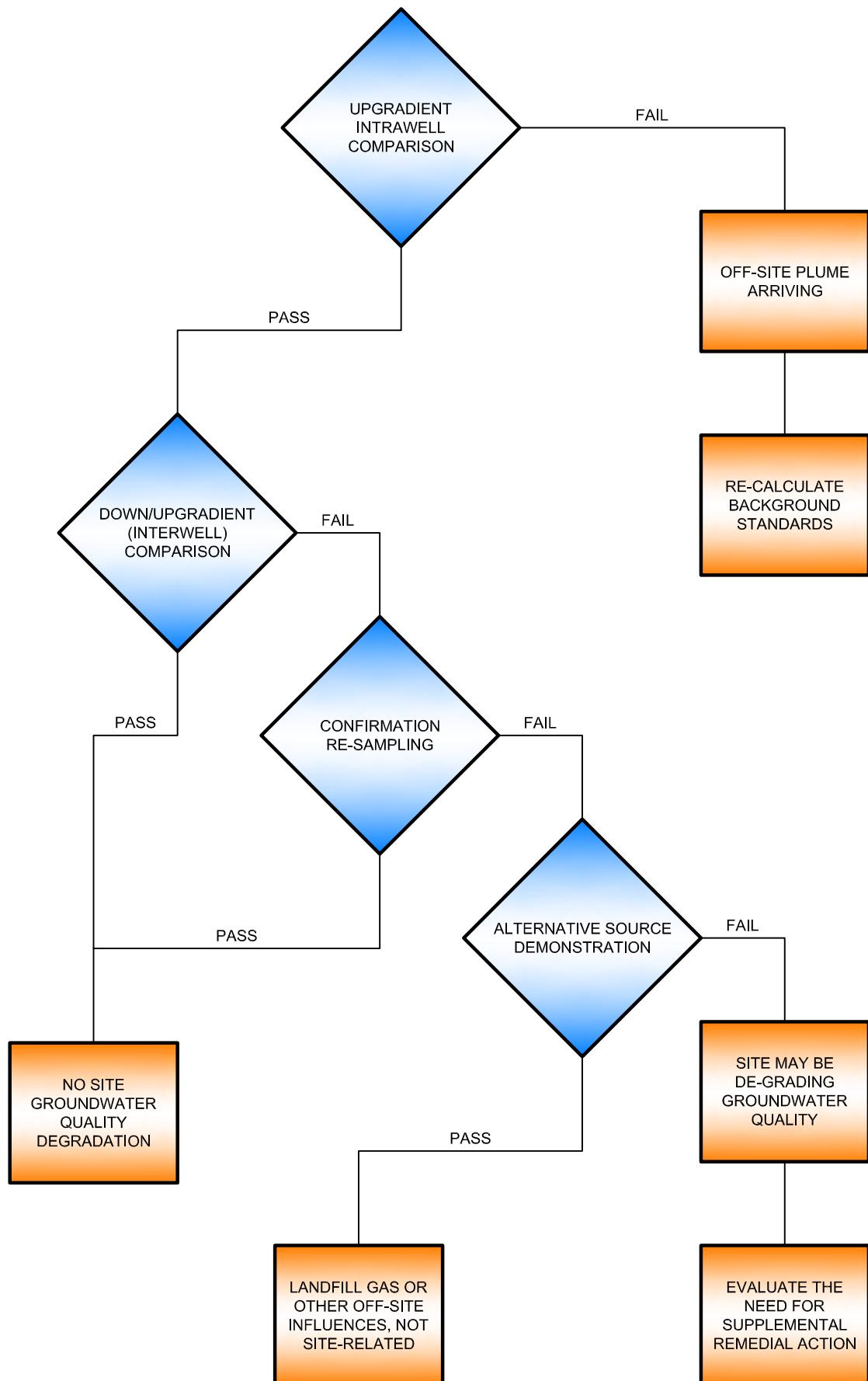


**Total VOCs in Well MW08  
IPC/Roto-Rooter Site**



**Total VOCs in Well MW09  
IPC/Roto-Rooter Site**





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INTERSTATE  
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070309

**FIGURE 2**  
**STATISTICAL EVALUATION FLOW CHART**  
 INTERSTATE POLLUTION CONTROL  
 ROCKFORD, ILLINOIS

AUGUST 2008

**Summary of Interwell Statistical Re-Calculations**  
**IPC - Roto Rooter Site**

Parameter ID	Parameter	Units	Upper Limit	Lower Limit	Bkgd N	Bkgd Wells	Bkgd Mean	Standard Deviation	% NDs	Adjustment for NDs	Transformation	Alpha	Method
190504	1,1-Dichloroethane	ug/L	14	n/a	12	MW3,MW5,MW6	n/a	n/a	50	n/a	failed	0.077	NP (normality)
190525	Tetrachloroethene	ug/L	45.8	n/a	12	MW3,MW5,MW6	20.7	13.4	16.67	Cohen's	none	0.05	Param.
185820	Trichloroethene	ug/L	340	n/a	12	MW3,MW5,MW6	152	100	8.333	No	none	0.05	Param.

Background data collection: Dec-07, Jun-08, Dec-08, Jun-09.

**Summary of Intrawell Statistical Re-Calculations**  
**IPC - Roto Rooter Site**

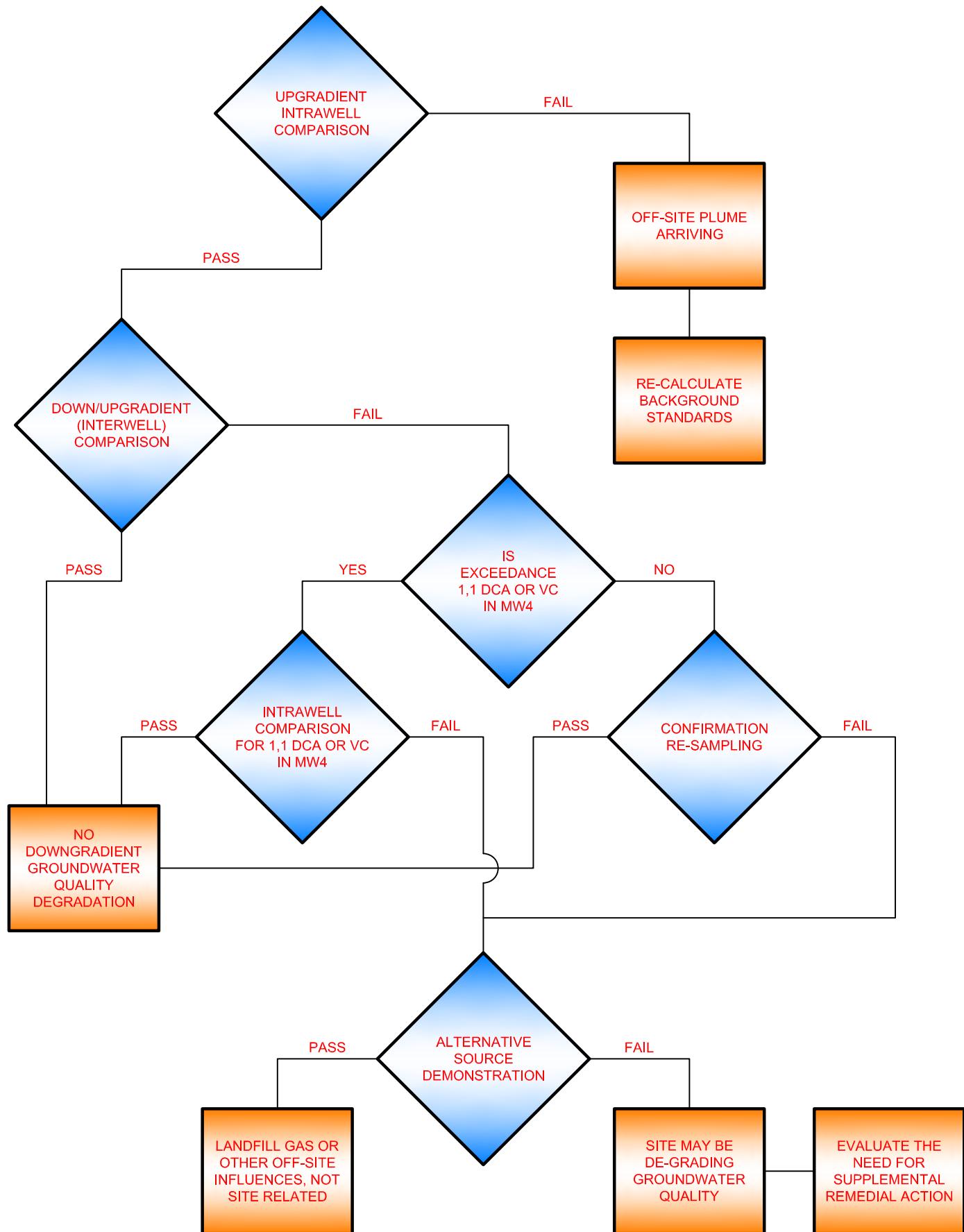
Well	Parameter ID	Parameter	Units	Upper Limit	Lower Limit	Bkgd N	Bkgd Mean	Standard Deviation	% NDs	Adjustment for NDs	Trans-formation	Alpha	Method
MW3	190504	1,1-Dichloroethane	ug/L	11	n/a	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
MW6	190525	Tetrachloroethene	ug/L	47.6	n/a	4	5.01	8.39	50	Cohen's	none	0.01	Param.
MW6	185820	Trichloroethene	ug/L	220	n/a	4	24.1	38.5	25	Cohen's	none	0.01	Param.

Background data collection: Dec-07, Jun-08, Dec-08, Jun-09.

**Background Data**  
**IPC - Roto Rooter Site**

Well	Parameter ID	Parameter	Units	Dec-07		Jun-08		Dec-08		Jun-09	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
MW3	190504	1,1-Dichloroethane	ug/L	5	U	5	U	5	U	11	
MW3	190525	Tetrachloroethene	ug/L	29		23		25		28	
MW3	185820	Trichloroethene	ug/L	310		210		230		170	
MW5	190504	1,1-Dichloroethane	ug/L	10		5	U	8.8		6	
MW5	190525	Tetrachloroethene	ug/L	22		40		29		34	
MW5	185820	Trichloroethene	ug/L	160		250		200		180	
MW6	190504	1,1-Dichloroethane	ug/L	14		5	U	6.8		5	U
MW6	190525	Tetrachloroethene	ug/L	5	U	5	U	6.1		15	
MW6	185820	Trichloroethene	ug/L	5	U	11		32		73	

Qualifier U - Not Detected



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**FIGURE 2**  
**REVISED STATISTICAL EVALUATION FLOW CHART**

INTERSTATE POLLUTION CONTROL  
ROCKFORD, ILLINOIS

070309

AUGUST 2009